

**Review of fares for taxis, private buses  
and private ferries in NSW**

**An Issues Paper**

**April 2003**

**INDEPENDENT PRICING AND REGULATORY TRIBUNAL  
OF NEW SOUTH WALES**



# **Review of fares for taxis, private buses and private ferries in NSW**

## **An Issues Paper**

**Discussion Paper DP62**

**April 2003**

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### **Request for submissions**

Submissions are invited from interested parties to all Tribunal investigations. Unless confidentiality is sought, the submissions are generally available for public inspection at the Tribunal's offices and will be available on-line in PDF format for up to 3-4 weeks after the release of an inquiry report. The Tribunal exercises its discretion not to exhibit any submissions based on their length or content (containing material that is defamatory, offensive, or in breach of any law).

For price reviews/determinations, submissions are initially sought from agencies or relevant associations on their pricing proposals. These proposals are available about 4-6 weeks before the due date for public submissions to allow for their consideration in the preparation of other stakeholder submissions.

For these reviews of taxi, private bus and private ferry fares, submissions from the Taxi Council and the Transport Workers' Union have been requested by Friday 2 May 2003.

Submissions from other stakeholders are requested by Friday 30 May 2003.

Submissions should be sent to:

Taxi, private bus and private ferry reviews  
Independent Pricing and Regulatory Tribunal  
PO Box Q290  
QVB Post Office NSW 1230

Electronic submissions in the form of Microsoft Word or Acrobat PDF documents will also be accepted. Electronic submissions should be sent to [ipart@ipart.nsw.gov.au](mailto:ipart@ipart.nsw.gov.au).

### **Confidentiality**

Special reference must be made to any issues in submissions for which confidential treatment is sought and all confidential parts of submissions must be clearly marked. *However, it is important to note that confidentiality cannot be guaranteed as the Freedom of Information Act and section 22A of the Independent Pricing and Regulatory Tribunal Act provide measures for possible public access to certain documents.*

### **Public information about the Tribunal's activities**

Information about the role and current activities of the Tribunal, including copies of latest reports and submissions can be found on the Tribunal's web site at [www.ipart.nsw.gov.au](http://www.ipart.nsw.gov.au).

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# TABLE OF CONTENTS

<b>1</b>	<b>INTRODUCTION</b>	<b>1</b>
	1.1 Review process and timetable	1
	1.2 Key issues	2
<b>2</b>	<b>OVERVIEW OF THE TAXI, PRIVATE BUS AND PRIVATE FERRY INDUSTRIES IN NSW</b>	<b>3</b>
	2.1 Taxis: structure and revenue	4
	2.2 Private buses: structure and revenue	9
	2.3 Private ferries: structure	12
<b>3</b>	<b>EXISTING REGULATORY FRAMEWORK</b>	<b>15</b>
	3.1 Taxis	15
	3.2 Private buses	15
	3.3 Private ferries	16
<b>4</b>	<b>THE CURRENT APPROACH TO PRICE REGULATION</b>	<b>17</b>
	4.1 The cost index approach	17
	4.2 Advantages and disadvantages of the cost index approach	23
	4.3 Alternative approaches	24
<b>5</b>	<b>FARE LEVELS AND STRUCTURE</b>	<b>27</b>
	5.1 Taxis: average fare and the balance between components	27
	5.2 Private buses: fares relative to STA bus fares	34
	5.3 Private ferries: fares relative to STA ferry fares	36
<b>6</b>	<b>SERVICE QUALITY</b>	<b>39</b>
	6.1 Performance requirements	39
	6.2 Bus and ferry reform	44
<b>7</b>	<b>OTHER ISSUES</b>	<b>45</b>
	7.1 Environmental issues: public transport externalities	45
	7.2 Social impacts: personal and household incomes	46
	<b>ATTACHMENT 1 TERMS OF REFERENCE</b>	<b>53</b>
	A1.1 Terms of reference for taxis	53
	A1.2 Terms of reference for private buses	54
	A1.3 Terms of reference for private ferries	55
	<b>ATTACHMENT 2 EVIDENCE ON TAXI FARE ELASTICITIES</b>	<b>57</b>
	<b>ATTACHMENT 3 ABBREVIATIONS</b>	<b>59</b>



# 1 INTRODUCTION

In response to a request from the Minister for Transport<sup>1</sup>, the Independent Pricing and Regulatory Tribunal of NSW (the Tribunal) is undertaking its annual reviews of fares for taxi, private bus and private ferry services in the state.<sup>2</sup> Based on these reviews, it will recommend fare changes from 1 September 2003.

Under the terms of references for the reviews, the Tribunal is required to consider a range of matters, including:

- the cost of providing the services concerned, and relativities with government-owned public transport services
- the need for greater efficiency in the supply of these services
- the protection of consumers from abuses of monopoly power in terms of prices, pricing policies and standards of service (including quality, reliability and safety standards)
- the impact of its recommendations on the financial viability of service operators, the environment and customers.

The full terms of reference for each review is provided in Attachment 1. In addition to these terms, the Minister has asked the Tribunal to assess:

- alternatives to the cost index model submitted by the Bus and Coach Association (BCA) as a basis for commercial bus fare changes
- alternatives to the non-commercial model submitted by the BCA as a basis for non-commercial bus operator payment changes, having regard to relevant contractual issues
- the cost index model submitted by the Taxi Council as a basis for taxi fare changes
- specific changes to components of the taxi fare structure (flagfall, distance, waiting time and radio booking fee).

## 1.1 Review process and timetable

The Tribunal will consider each of the matters outlined above, together with submissions from key stakeholders and the general community before making its recommendations. It invites all interested parties to make submissions to the reviews.

An indicative timetable for the review is set out below. Details on how to make a submission are on the page preceding the Table of Contents. The Director General of the Department of Transport will make the final decision on fare changes after considering the Tribunal's report.

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<sup>1</sup> From 2 April 2003 the appropriate minister is the Minister for Transport Services. The Department of Transport has been superseded by the Transport Co-ordination Authority.

<sup>2</sup> Concurrent with this review of taxi, private bus and private ferry fares, the Tribunal is conducting its annual STA Buses and Ferries and CityRail determinations.

<b>Action</b>	<b>Indicative time table</b>
Advertise review and notify key stakeholders	4 April 2003
Receive submissions from Taxi Council, Transport Workers' Union	2 May 2003
Receive submissions from other stakeholders	30 May 2003
Make recommendations to the Director General	August 2003

## **1.2 Key issues**

To assist stakeholders in making submissions, this paper outlines the key issues the Tribunal must consider as part of these reviews. These issues include:

- Should the current approach to setting fares for taxi, private bus and private ferry services be changed?
- Are the current fare levels and fare structures appropriate?
- Is the quality of service provided by taxis, private buses and private ferries adequate?
- What are the implications for the environment of taxi, private bus and private ferry fares, and how should these implications be considered in the fare setting process?
- What are the potential social impacts of higher fares, and how should these be considered in the fare setting process?

The next two chapters of this paper put the reviews in context, by providing some background information on the taxi, bus and ferry industries, and the way in which they are regulated in NSW. The remaining chapters discuss each of the key issues in detail.

## 2 OVERVIEW OF THE TAXI, PRIVATE BUS AND PRIVATE FERRY INDUSTRIES IN NSW

Taxis, private buses and private ferries provide important public transport services that supplement those provided by the government-owned entities, State Rail Authority (SRA) and State Transit Authority (STA). On an average weekday, Sydney residents take just under two million trips by public transport (Table 2.1). Of these, 6.4 per cent are by taxi and 19.8 per cent are by private bus. This table excludes trips taken by tourists, who make extensive use of ferries and taxis.

**Table 2.1 Trips by residents on an average weekday, Sydney Statistical Division**

<b>Mode</b>	<b>1991 '000</b>	<b>1999 '000</b>	<b>2000 '000</b>	<b>Percentage of trips in 2000</b>
Total private vehicle	9,216	10,867	10,921	69.8 %
<b>Train</b>	<b>691</b>	<b>770</b>	<b>784</b>	<b>5.0 %</b>
<b>Bus</b>	<b>917</b>	<b>963</b>	<b>921</b>	<b>5.9 %</b>
Of which: <b>Gov't Bus</b>			554	3.5 %
<b>Private Bus</b>			367	2.4 %
<b>Ferry</b>	<b>33</b>	<b>37</b>	<b>34</b>	<b>0.2 %</b>
Total public transport	1,641	1,771	1,739	11.1 %
Walk only	2,700	2,712	2,724	17.4 %
Bicycle	98	90	86	0.5 %
<b>Taxi</b>	<b>103</b>	<b>109</b>	<b>119</b>	<b>0.8 %</b>
Other	20	47	61	0.4 %

Source: Transport Data Centre, Household Travel Survey 2000.

Note: Figures in tables are rounded, but percentages are calculated from original unrounded data. They do not include trips taken by international, interstate or intrastate visitors, as these are not collected by the TDC.

According to the Transport Data Centre (TDC), the use of all public transport services has declined in the last two years. In 2001/02, the number of trips taken fell by between 3 and 8 per cent (depending on the service).<sup>3</sup> Trips on private buses fell 5.1 per cent, Sydney Buses 4.1 per cent and Sydney Ferries by 7.9 per cent. No data were cited for private ferries and taxis (although the RTA road traffic count rose 0.5 per cent).

The TDC attributes this decline to several factors, one of which was the increase in fares in 2000 due to the introduction of the GST as well as annual increases. Other factors include reduced white collar employment (particularly in the CBD and in the finance, insurance, communications and technology sectors), lower petrol prices, the opening of the M5 East and the decline in tourism after the 2000 Olympics and the September 11 terrorist attack in New York.<sup>4</sup>

The taxi, private bus and private ferry industry each has quite different characteristics in terms of their structure and revenue. An overview of each industry is provided below.

<sup>3</sup> TDC, drawing on industry sources for all trips by residents and visitors, excluding taxi trips.

<sup>4</sup> TDC Patronage Monitoring Report, October 2002.

## 2.1 Taxis: structure and revenue

### 2.1.1 Structure

The structure of the NSW taxi industry can be analysed in terms of its geography, supplier structure and customer structure.

#### *Geography*

The industry can be seen as two distinct districts—the ‘metro’ and the ‘country’—which have different distance, booking and ownership characteristics. The metro area encompasses Sydney suburbs bounded by Hornsby, Penrith and Sutherland. The country area encompasses the rest of NSW, including Newcastle, Wollongong and Gosford.<sup>5</sup>

For fare-setting purposes, however, the industry is divided into three areas: ‘urban’, ‘country’ and ‘exempt’. The ‘urban’ area for taxi fares includes the Sydney metro area plus Newcastle, Wollongong, the Blue Mountains, Gosford, Wyong, Shellharbour, Williamtown, Raymond Terrace, Hexham, Maitland, Beresfield, Fullerton Cove, Tomago, Cams Wharf, Fern Bay, Minmi, Toronto, Medowie, Campvale, Fassifern, Ferodale, Bargo, Tahmoor, Thirlmere, Picton and Camden. The ‘country’ area is defined as all areas in NSW except those in the ‘urban’ and ‘exempt’ areas. This includes several large towns, such as Armidale, Bathurst and Albury. ‘Exempt’ areas are specific areas in which the scheduled tariffs do not apply. They include Moama, Barham, Tocumwal, Mulwala, Barooga and Deniliquin.

#### *Suppliers*

The suppliers in the taxi industry include drivers, owners, operators, networks, booking service providers and payment service providers.

**Drivers.** There are 22,773 authorised taxi drivers in NSW,<sup>6</sup> of which 3,872 are registered as country taxi drivers. The Taxi and Hire Car Bureau (THCB) estimate that only around 12,000 of these authorised drivers are currently active.

**Owners.** There are around 5,924 taxi licences (or ‘plates’) on issue in NSW, owned by 4,250 individuals and companies.<sup>7</sup> Anecdotal evidence suggests that about half these owners are also drivers, while the other half lease their plates to operators of taxi businesses. According to the THCB, there is a steady trend towards overseas ownership of taxi licences.

For the past two decades, individuals and companies have been permitted to own multiple licences with the result that the industry is now more concentrated than the number of owners makes it appear.

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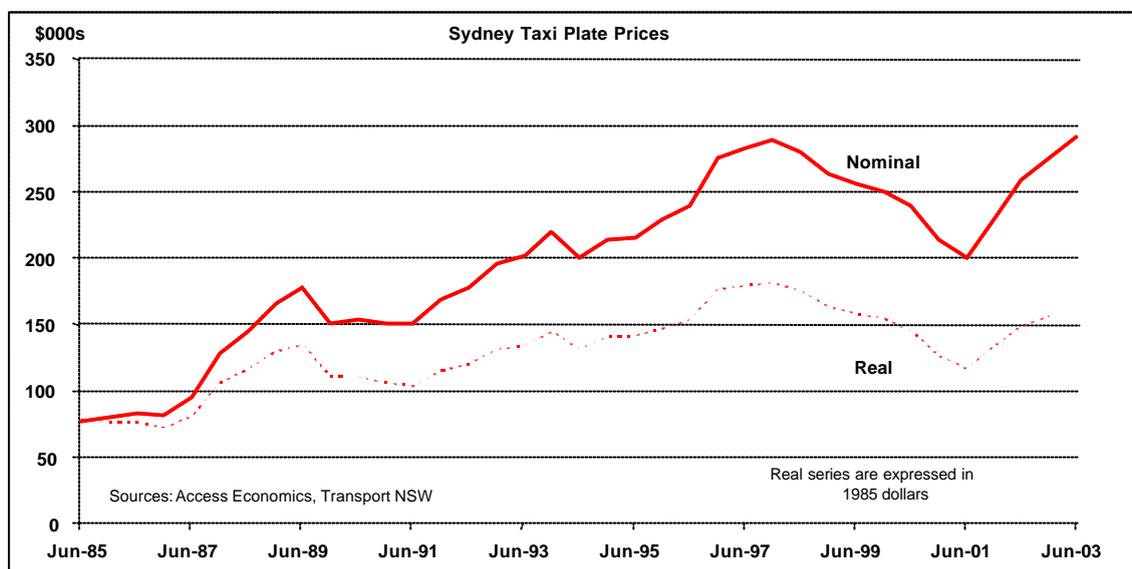
<sup>5</sup> In some parts of rural NSW, there are no taxi services.

<sup>6</sup> Figure from Transport NSW’s Taxi and Hire Car Bureau, current as at 16 March 2003.

<sup>7</sup> THCB database; as at 16 March 2003.

The secondary market for licences is moderately active (about one per cent or 50 plates a year are traded in urban areas and between one and two per cent in country areas). Figure 2.1 shows that in nominal terms prices of Sydney metropolitan taxi plates are about \$290,000. This is above the previous highs reached before the Asian Crisis damaged tourism in 1998.

Figure 2.1 Sydney Taxi Plate Prices



**Operators** All taxi operators in NSW are accredited by Transport NSW, either as an accredited owner (which allows an individual or company to own a plate and lease it out) or as an accredited operator. According to the THCB, there are 3,891 operators in NSW running 5,924 taxis. Of the operators, 2,917 operate one taxi only.<sup>8</sup> Of the taxis, 158 operate in Newcastle, 125 in Wollongong, 930 in country NSW and 4,711 in Sydney. The peak body which represents operators is the NSW Taxi Industry Association.

**Networks** Taxi networks are facilities provided for the delivery of taxi services involving affiliated, accredited taxi-cab operators, including a taxi-cab booking service.<sup>9</sup> There are 10 metropolitan taxi networks and 57 country networks, all represented on the NSW Taxi Council. The Tribunal is aware of mini-networks among some drivers but is unable to quantify their sizes or growth.

<sup>8</sup> Taxi and Hire Car Bureau, as at 16 March 2003.

<sup>9</sup> As defined by section 29A of the PTA.

**Table 2.1 Sydney Taxi Companies and their booking service affiliations**

<b>Network</b>	<b>No. of taxi cabs</b>	<b>Bureau/booking service</b>
Taxis Combined	2510	CCN
Cumberland Cabs	712	Premier
Legion	535	Legion
RSL	227	Legion
St George Cabs	208	Legion
Manly Warringah Cabs	167	CCN
ABC	143	CCN
South Western Cabs	96	CCN
Western Districts	76	Premier
Northern Districts	37	Premier
<b>Total</b>	<b>4711</b>	

Source: Taxi and Hire Car Bureau and NSW Taxi Council.

CCN is the abbreviation for the Combined Communications Network; Cumberland Cabs, Western Districts and Northern Districts badge their cabs as Premier Cabs.

According to the Cabcharge website, the largest taxi company in Australia is Taxis Combined Services (TCS) which badges its cabs as Taxis Combined, Silver Service, Computer Cabs and Yellow Cabs. TCS is wholly owned by Combined Communications Network Limited (CCN) which is wholly owned by Cabcharge. Cabcharge is 71 per cent owned by its 20 largest shareholders of whom 12 are taxi companies or individuals very close to them.

The CCN network services 62 per cent of taxis in the metropolitan area. Large networks also operate in country areas. Many smaller towns are serviced by a single network operator.

**Booking Services** At present, just three networks provide radio booking services. The largest, the CCN call centre, averages 25,000 calls a day.<sup>10</sup>

**Payment Services** Customers may pay fares by means of cash, credit card or Cabcharge docket/card. In 1998 the proportion of Sydney taxi fares paid by cash was apparently around 87 per cent (Table 2.2). These results, based on a survey of 1,500 Sydney taxi customers, do not distinguish between types of credit card.

**Table 2.2 How taxi users paid taxi fares in Sydney in 1998**

	<b>Residents</b>	<b>Visitors (Total)</b>	<b>Visitors Overseas</b>	<b>Visitors Other States</b>	<b>Visitors Other NSW</b>
	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>
Cash	87.3	87.0	93.2	76.2	85.9
Credit card	6.1	8.2	7.2	11.9	4.2
Docket/Voucher	13.6	7.8	2.2	16.6	11.3
EFTPOS	0.3	0.0	0.0	0.0	0.0

Source: Transport Data Centre, Customer Survey April 1998. The data do not add to 100 per cent so must be taken as indicative only.

<sup>10</sup> Cabcharge website.

Nearly all taxis in Australia (96 per cent) use the Cabcharge system (as do an undisclosed number of hire cars, water taxis, coaches and air-transport operators). Under this system, customers can pay fares by Cabcharge docketts and cards and bank and other third-party cards. Turnover of the company comprises the full value of fares charged through Cabcharge, plus the component of the service fee charged and retained by the company.

Cabcharge revenue in 2002 was \$566m, of which 64 per cent was from Cabcharge docketts and cards. Electronic payments have grown rapidly in recent years relative to the use of docketts. By the December half of 2002, 48 per cent of all of Cabcharge's transactions were being processed electronically. All revenue came from Australian operations.<sup>11</sup>

### *Customers*

The industry faces three sub-markets: those who book by phone (via the networks and direct to driver), those who go to a taxi rank and those who hail a taxi in the street. In the metro area, phone bookings constitute 44 per cent of total hirings,<sup>12</sup> and hails account for about 30 per cent (mostly in the Sydney CBD). In the country, most hirings come via phone and rank with a much smaller proportion from hailing.

By customer type, the market comprises Sydney residents, intrastate visitors, interstate visitors and international visitors. Data are most reliable in relation to residents.

While a cross-section of Sydney residents use taxis, most demand comes from full- and part-time workers (Table 2.3).

**Table 2.3 Labour force status and income of taxi users**

Labour Force Status	No. trips	Average Household Income
Full time work	73,325	\$131,816
Part time work	9,042	\$73,726
Retired / aged pensioner	8,912	\$73,111
Adult full time study	6,910	\$56,999
Other pensioner	6,459	\$18,618
Child full time study	6,446	\$54,962
Keeping house	4,123	\$97,482
Unemployed	2,294	\$46,727
Child not in school	1,121	\$19,008
Voluntary work	500	\$9,048
<b>Total</b>	<b>119,132</b>	<b>\$103,977</b>

Source: Transport Data Centre, Household Travel Survey 2000.

Taxi users tend to have higher average household incomes than users of other forms of public transport. They tend to use taxis to travel home and to social events.<sup>13</sup> The latest available data from the TDC indicate that the average length of a taxi trip by Sydney residents in 2000 was 7.2km.

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<sup>11</sup> Cabcharge website.

<sup>12</sup> TDC Sydney taxi customer survey report No. 98/4. Anecdotal evidence suggests the percentage is now below 44 per cent.

<sup>13</sup> See IPART, *Review of the taxi cab and hire car industries – Issues Paper*, DP27, 1998, Table 2, p 6.

## 2.1.2 Revenue

### *Total Revenue*

Revenue is derived overwhelmingly from fares. The Taxi Transport Subsidy Scheme reimbursed \$13.2m to taxis in 2001/02.<sup>14</sup> Supplementary income for cab operators is derived from advertising and some drivers sell other products and services to passengers. The income from such activities has not been disclosed to the Tribunal.

An estimate of total fare revenue based on meter readings was not provided to the Tribunal in either 2001 or 2002. The major operators are well able to collect information on their own fleets since taxi meters have a score of memory functions. The reason often stated for a lack of data is that urban operators receive fixed pay-ins rather than a percentage of the fare (unlike country taxis and some other taxi jurisdictions such as the ACT).

One indication of the possible size of the non-cash revenue of the industry can be gleaned from the sales revenue of Cabcharge. Cabcharge received \$566m from Australian operations for 2001/2002, of which about \$524m was taxi revenue and the rest was Cabcharge's service fees.

Fares paid by cash are obviously not included. **If** 75 per cent of fares were paid in cash (assuming that credit cards and dockets have gained market share from cash since the 87 per cent in the 1998 survey), the revenue of the taxi industry would be around \$2.1bn a year. Given that 42 per cent of taxis are located in NSW, a prorata share of annual taxi revenue in NSW would be about \$880 million or an average **\$149,000** for each of NSW's 5,924 taxis.

The Tribunal stresses that this indicative figure could be well wide of the mark because of the assumption that 75 per cent of fares are paid in cash and the share of total revenue assumed to be earned within NSW.

Using reasonable assumptions for trips, trip lengths and shifts per week and weeks per year, the TWU Taxi Drivers' Committee submission in May 2002 suggested a taxi operated by drivers of average skill might earn around **\$154,000** a year.

These attempts to estimate revenue per taxi rely on several key assumptions and thus highlight the need for more reliable data, since the Tribunal considers the financial state and health of the taxi business in NSW to be the appropriate backdrop against which to pursue a fare-setting process.

### *How total revenue is distributed*

Bailee drivers in the metro area receive remuneration based on the set "pay-in" method. The pay-in varies between day and night and between nights of the week. A driver's income is all fare revenue for the shift net of the GST and the fixed pay-in to the taxi operator. The driver's costs are fuel and cleaning the taxi. In country areas, driver pay-ins are a set percentage of post-GST takings, usually 50 per cent.

The size of the daily pay-in is determined by the NSW Industrial Relations Commission (Table 2.4). In 2001 and 2002, the Commission had regard to the Tribunal's fare recommendations to the Minister when considering increases in the size of pay-ins.

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<sup>14</sup> Transport NSW *Annual Report*, 2001/02.

Because the Tribunal's purpose is different from the Commission's, the Tribunal proposes to clarify how, in its view, operators might be compensated for the change in their costs (as measured by the operator-cost components in the Taxi Cost Index). The Tribunal intends to state this in such a way that the cost increases experienced by drivers are also apparent.

**Table 2.4 Maximum Recommended Pay-ins, effective from 15 October 2002<sup>15</sup>**

		Maximum Pay-Ins	Plus \$0.49c per kilometre over:
DAY SHIFTS		\$118.28	260km
NIGHT SHIFTS	Monday	\$128.34	300km
	Tuesday	\$130.57	320km
	Wednesday	\$140.79	320km
	Thursday	\$158.84	350km
	Friday	\$180.16	400km
	Saturday	\$180.16	400km
	Sunday	\$139.65	320km

The current pay-ins mean that if a taxi were driven for five day shifts and six night shifts, the weekly pay-in would be \$1,522. If it were on the road for 47 weeks, the total annual pay-in would be \$71,514. Of course, the actual number of weekly shifts and weeks on the road may vary widely between taxi operators depending on operator choice, the availability of drivers and the time needed for repairs and maintenance on individual taxis.

## **2.2 Private buses: structure and revenue**

### **2.2.1 Structure**

#### *Geography*

In Sydney, private bus operators provide services over western, north-western and south-western districts, as well as the Central Coast and Blue Mountains. This area includes the lower density residential areas and new urban fringe suburbs. It also incorporates the commercial centres of Bankstown, Blacktown, Campbelltown, Hornsby, Liverpool, Parramatta and Penrith.<sup>16</sup>

#### *Suppliers*

Transport NSW reports that the bus and coach industry comprises:

- 234 commercial contracts and 1,798 non-commercial contracts
- 1,747 accredited long distance tourist operators, 1,727 regular passenger (bus) service operators and 52,466 driver authorities.

<sup>15</sup> Source: NSW Taxi Council website.

<sup>16</sup> In Sydney, STA services cover eastern Sydney, from Palm Beach in the north to Carlingford, Parramatta, Lidcombe and Bankstown in the west, and Miranda and Hurstville in the south. Private operators provide bus services in the remainder of Sydney. STA's area of operation generally encompasses higher density, older established suburbs and includes the commercial centres of the Sydney CBD, North Sydney, St Leonards/Crows Nest, Chatswood and Macquarie/North Ryde.

According to Transport NSW, 32 private companies and about 2,000 accredited buses provide bus services in Sydney. In the rest of NSW, 113 private companies are accredited to operate about 4,000 buses. Table 2.5 lists BCA-member bus companies who operate more than 30 buses.

**Table 2.5 BCA-member private bus companies with fleet size above 30**

Bus Company	Location	Indicative no. of buses	Bus Company	Location	Indicative no. of buses
BLUE RIBBON	THORNTON	161	WESTBUS WINDSOR	NTH PARRAMATTA	49
CONNEX NSW	BANGOR	133	ROVER MOTORS	CESSNOCK	48
PREMIER ILLAWARRA	FIGTREE	110	BERRIMA COACHES	MITTAGONG	45
WESTBUS (PENRITH)	NTH PARRAMATTA	108	BUSWAYS CAMDEN	CAMDEN	44
WESTBUS (PARRAMATTA)	NTH PARRAMATTA	102	BUSWAYS WYONG	CHARMHAVEN	44
WESTBUS (BONNYRIGG)	NTH PARRAMATTA	89	EDWARDS COACHES	ARMIDALE	44
THE ENTRANCE RED BUS	BATEAU BAY	83	BUSWAYS CAMPBELLTOWN	CAMPBELLTOWN	43
TORONTO BUS SERVICES	TORONTO	81	PUNCHBOWL BUS CO	RIVERWOOD	43
BUSWAYS GOSFORD	KINCUMBER	77	WESTWAY BUS & COACH	GEORGES HALL	43
TRANSDEV NSW T/A SHORE	MT KURING-GAI	77	CAVANAGH C A AND C	KEMPSEY	42
HOLROYD BUS LINES	GIRRAWEEEN	76	HARRIS PARK TRANSPORT	PARRAMATTA	41
KIRKLANDS COACHES	LISMORE	74	EGGINS HOLDINGS	TAREE	35
GLENORIE BUS CO	DURAL	72	NEVILLES BUS SERVICE	HOXTON PARK	35
BUSWAYS BLACKTOWN	GLENDENNING	69	INTERLINE BUS	INGLEBURN	34
FOREST COACH LINES	TERREY HILLS	62	OGDEN E C & F	WELLINGTON	33
FEARNE AND SON	WAGGA WAGGA	58	WESTBUS (SEVEN HILLS)	NTH PARRAMATTA	32
SURFSIDE BUSLINES	NERANG	55	MARTIN F & R	ALBURY	31
DEANES BUSLINES	QUEANBEYAN	49	NOWRA COACHES	NOWRA	31
PEARCE OMNIBUS	VALLEY HEIGHTS	49	OLIVER'S METRO-LINK	LIVERPOOL BC	31

Source: BCA. The BCA represents about 830 bus and coach businesses in NSW.

### Customers

In Sydney, on an average weekday, passengers make 367,000 trips on private buses. Many are school children and concession passengers. Just 20 per cent of all trips, or about 74,000, are by full fare paying passengers, the bulk of whom hold full or part time jobs (Table 2.6).

**Table 2.6 Labour force status and household income of full-fare paying passengers**

Labour Force Status	No. trips	Average Household Income
Full time work	48,121	\$71,514
Part time / casual work	11,014	\$60,299
Keeping house	5,975	\$34,249
Adult in full time study	2,735	\$50,601
Unemployed	2,528	\$57,429
Adult in high school	1,619	\$31,621
Other pensioner	1,230	\$9,048
Other adult	401	\$40,768
Adult in part time study	250	\$5,148
<b>Total</b>	<b>73,873</b>	<b>\$63,266</b>

Source: Transport Data Centre, Household Travel Survey 2000. Data refer to the Sydney Statistical Division.

## 2.2.2 Revenue

Private bus operators contracted to provide public transport receive revenue from full fare paying customers, half-fare concession travellers and the School Student Transport Scheme (SSTS). Underutilised buses may be used to earn revenue from charter and tourist services. The Tribunal has no data on revenue from charters and tours.

The Tribunal estimates that private bus companies in Sydney receive around \$62 million a year from full fare paying passengers.<sup>17</sup> The Tribunal has no estimate of revenue from full fare paying passengers in country areas. Half-fare paying passengers in NSW paid around \$30m in 2001/02.

Such farebox revenue of \$92 million is small compared to the \$331 million private buses were paid in 2001/02 under the SSTS and the \$30m reimbursement for half-fare-paying passengers.<sup>18</sup>

All up, NSW private bus revenue excluding charters and tours looks to be at least \$453m, skewed heavily towards Government reimbursement and contract payments.

The full fare is the crucial price variable for determining private bus profitability under current regulatory arrangements. Any full fare increase recommended by the Tribunal affects revenue of the bus companies four ways - by:

1. Increasing the daily fares paid by full fare paying passengers and half fares of concession travellers.
2. Reducing the number of full fare paying passengers and concession travellers if the relative price of private bus travel rises relative to alternative means of transport and is the determining factor in their decision.
3. Increasing the concessional payments by Government to fill the gap between the full fare and the concessional fare.
4. Increasing the SSTS commercial contract payments by Government. The Public Accounts Committee noted "the key cost driver [of the SSTS scheme] has been changes in commercial contract bus fares"<sup>19</sup> rather than de-zoning or other educational and/or transport policies as such.

Looking ahead to the likely growth in school student numbers, ABS population projections suggest the number of children aged 5 to 19 in NSW is likely to rise modestly at best to 2011. Under the fastest-growth scenario (Series I, which assumes high fertility and high migration), the number will rise by 1.4 per cent or just 19,900 in the 10 years to 2011.<sup>20</sup>

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<sup>17</sup> According to the Transport Data Centre, full fare paying private bus passengers take 74,000 trips each weekday at an average of 7.6km per trip. Since the price for a trip that length is \$3.10, that implies total revenue of around \$230,000 per weekday, or \$57.5 million in a working year. For weekends, full fare payers take about 14,500 trips. The daily revenue of \$45,000 implies annual revenue of \$4.7 million.

<sup>18</sup> Transport NSW Annual Report p 75.

<sup>19</sup> NSW Public Accounts Committee, *Inquiry into SSTS* Report No. 131, February 2002, p 26.

<sup>20</sup> ABS Population Projections Australia 1999-2101 Cat. No. 3222.0, p 81.

Some private bus lines are still benefiting from big rises in the number of children aged 0-4 over 1990-95. The biggest increases were mostly located in several private bus company areas; namely, Blacktown, Camden, Canterbury (mostly an STA area), Liverpool, Parramatta and Wyong.<sup>21</sup>

## **2.3 Private ferries: structure**

### **2.3.1 Structure**

The seven private ferry operators in NSW all provide commercial services. In Sydney Harbour, private ferry operators face a degree of competition from Sydney Ferries, however, each operator provides a separate service on a designated line of route (point to point or wharf to wharf).

In Sydney Harbour, Matilda Cruises and Hegarty's Ferry Company provide regular ferry services. Captain Cook Cruises ceased operation of the former Hegarty's Ferries in January 2003, but services have since resumed under new ownership. Hegarty's Ferries services Circular Quay, Darling Harbour, King Street wharf, McMahon's Point and Kirribilli wharves.

Matilda Cruises operates regular services on the following routes:

- Cockle Bay – Aquarium Wharf – Circular Quay
- Circular Quay – Lane Cove river wharves
- Darling Harbour – Bayview Park – Cape Cabarita – Cabarita Point – Kissing Point – Homebush Bay.

Most of the remaining five private ferry operators are much smaller in scale, and the nature of journeys for passengers is likely to be quite different from the Sydney Harbour operators. In particular, it would be reasonable to expect less 'journey to work', and more discretionary travel among the smaller operators:

- Church Point ferry service: Scotland Island – Morning Bay
- Clarence River Ferries: Iluka – Yamba
- Cronulla and National Park Ferries: Cronulla – Bundeena
- Dangar Island ferry service: Brooklyn – Dangar Island
- Palm Beach Ferries: Palm Beach – Patonga, Palm Beach – Ettalong, Palm Beach – Mackerel Beach – Currawong – Basin – Bonnie Doon and Woy Woy to Empire Bay.

Regional private ferry operators appear to face no competition, but, in fact, water taxis, commuter dinghies and motor vehicles all compete with their services (although travel by road may in some cases take longer than by ferry). A degree of self-regulation is also likely to exist in that the operators are close to the communities they serve.

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<sup>21</sup> ABS website, Australia Now, Australian Social Trends 1997, Population – Population Growth: Australia's Child Population.

Use of private ferry services is often of a discretionary nature. In addition to regular passenger services, private operators (both ferry and bus) also offer leisure and charter cruises. As these types of services are not regular passenger services under the PTA 1990, they are not subject to price regulation, and hence do not form part of this review.

### **2.3.2 Revenue**

The Tribunal has not been able to estimate private ferry revenue nor has any estimate been provided by the Charter Vessel Association of NSW or private ferry owners/operators.



### 3 EXISTING REGULATORY FRAMEWORK

The Director General for Transport is responsible for setting fares for most services provided by taxi, private bus and private ferry operators, and these fares are regulated under the *Passenger Transport Act 1990* (PTA 1990). The Act specifies contract areas for which services are to be provided, the quality of these services and the maximum fares for these services.

At the Minister's request, the Tribunal's role is to recommend fares for these services. Thus its interest lies with the existing regulatory framework as it relates to fares. However, this framework also covers a range of other aspects of these industries, including service quality, safety, operator accreditation and market access.

#### 3.1 Taxis

The NSW taxi industry has been regulated since the late 1920s. At present, it is regulated by Transport NSW. Transport NSW derives its authority from the PTA 1990 and the *Passenger Transport (Taxi-Cab Services) Regulation 2001*. It issues licences, sets maximum fares, and sets driver and vehicle standards. The RTA administers extensive vehicle, driver and passenger safety legislation.

#### 3.2 Private buses

The NSW bus industry is regulated under the PTA 1990 and the *Passenger Transport (Bus Services) Regulation 2000*. Aspects of the industry that are regulated include:

- Transport NSW authorisation of persons who drive a public transport vehicle
- regular passenger bus services can only be carried out via a contract entered into between an accredited service operator and Transport NSW
- accredited operators must be of good repute, propose to be responsible for the operation of a public passenger service and must be able to demonstrate the capacity to meet the government's standards of financial viability, safety of passengers/the public and vehicle maintenance.

Under the PTA 1990, bus operators with commercial contracts have exclusive operating rights for five years and ongoing contract renewal for a specified contract area if they meet the terms and conditions of their service contracts. This includes meeting prescribed minimum service levels (MSLs), complying with maximum designated fares and keeping fleets below a specified average age.

Contracts fall into two categories:

- commercial contracts for a designated area where some revenue is generated by fare paying passengers; and
- non-commercial contracts where there is no commercial contract for regular route services and Transport NSW requires a service that carries school students along specified routes.

Commercial and non-commercial contracts each have different conditions for operation. These are discussed in more detail in chapter 6.

Fares for private buses are regulated under section 19 of the PTA 1990. This section specifies that:

- a commercial contract must fix a scale of maximum fares.
- the scale must be fixed at no less than the average level of fares prevailing in the industry for comparable services, and due allowance must be made for inflationary movements in the costs of providing the service
- maximum fares should be specified in terms of the distance for which a passenger, on payment of a fare, is entitled to be carried
- under a non-commercial contract, provision may be made for adjustments in respect of any shortfall or surplus resulting from the difference between the agreed contract price and any revenue generated by fares.

### **3.3 Private ferries**

The NSW Government regulates economic aspects of ferry services under the PTA 1990. Regular ferry service providers must hold operator accreditation and ferry masters must hold appropriate certification with the Waterways Authority for the type of vessel under their control. Operators of all other ferry services (long distance, tourist and charter ferry services) are not required to be accredited, and are effectively deregulated provided their services meet relevant definitions in the PTA 1990. Vessels seating less than nine adults (e.g. water taxis) are not regulated under this Act.

Regular ferry services may only be operated under the terms and conditions set out pursuant to:

- a service contract – section 16 of the PTA 1990
- an exemption from a service contract issued by the Director General or his delegate.

Under a service contract, exclusive rights on a ferry route or service area are granted to an operator for 5 years. Contracts may only be renewed if the requirements of a Performance Assessment Regime (PAR) are met. If no PAR has been specified and terms and conditions of the contract are met, the contract is renewed for 5 years. Thus, the regulatory framework for regular ferry services is the same as that for regular bus services.

Fares for private ferries are regulated under section 19 of the PTA 1990, the same as that for private buses.

## 4 THE CURRENT APPROACH TO PRICE REGULATION

This chapter outlines the existing approach to fare setting, its advantages and disadvantages and alternative approaches to fare (more generally, price or revenue) setting

### 4.1 The cost index approach

The cost index approach is a common approach to adjusting transport fares in the face of a lack of historical and current data on revenue and efficient costs. As the name suggests, the approach focuses on actual key costs incurred by the relevant industry, from which an index is constructed to measure cost changes over time.

#### 4.1.1 Taxis

In the past two reviews, the Tribunal has used amended cost indices. The original indices purported to measure the costs of operating a taxi in urban and country NSW.<sup>22</sup> The Tribunal was concerned that the indices did not include all the cost items involved in operating a taxi, and added several appropriately-weighted items, which lifted total costs well above the actual cost of operating a taxi.

**Table 4.1 Urban taxi operating cost index change in 2002**

Annual Costs	June 2001 Costs	June 2002 Costs	Percentage Change	Weights	Contribution to total rise
<b><u>Operator Expenses</u></b>					
<b>Fixed costs:</b>					
Vehicle lease payments	\$7,887	\$8,281	5.0%	4.8%	0.24
Insurance	\$12,025	\$12,737	5.9%	6.2%	0.37
Govt charges	\$739	\$739	0.0%	0.5%	0.00
Network fees	\$6,050	\$6,436	6.4%	3.4%	0.22
Plate lease fees	\$17,010	\$19,500	14.6%	14.1%	2.06
Annualised est'ment costs	\$1,295	\$1,399	8.0%	0.6%	0.05
<b>Variable costs</b>					
Maintenance labour	\$6,958	\$6,854	-1.5%	4.1%	-0.06
Vehicle parts and panels	\$10,403	\$10,944	5.2%	5.2%	0.27
Cleaning	\$360	\$360	0.0%	0.2%	0.00
Tyres	\$2,543	\$2,800	10.1%	1.6%	0.16
Operator's superannuation	\$969	\$1,002	3.4%	0.5%	0.02
Operator salary equivalent	\$12,108	\$12,525	3.4%	7.2%	0.25
Driver entitlements	\$3,705	\$3,731	0.7%	2.2%	0.02
Uniforms	\$2,400	\$2,400	0.0%	1.5%	0.00
Other	\$3,361	\$3,484	3.7%	2.0%	0.07
<b><u>Driver expenses</u></b>					
LPG Fuel	\$16,475	\$15,774	-4.3%	8.3%	-0.35
Bailee driver payments	\$60,092	\$62,135	3.4%	36.0%	1.22
Cleaning	\$2,860	\$2,860	0.0%	1.8%	0.00
<b>Total</b>	<b>\$167,240</b>	<b>\$173,961</b>		<b>100.0%</b>	<b>4.60%</b>

Note: The weights are as at September quarter 1999. Figures may not add due to rounding.

<sup>22</sup> The consultants PricewaterhouseCoopers were engaged by the Taxi Council to develop the cost index.

Table 4.2 Country taxi operating cost index change in 2002

Annual Costs	June 2001 Costs	June 2002 Costs	Percentage Change	Weight	Contribution to total rise
<b><u>Operator Expenses</u></b>					
<b>Fixed costs:</b>					
Vehicle lease payments	\$7,703	\$7,703	0.0%	5.8%	0.00
Insurance	\$6,476	\$6,858	5.9%	4.9%	0.29
Govt charges	\$739	\$739	0.0%	0.6%	0.00
Network fees	\$8,568	\$9,660	12.7%	6.9%	0.88
Plate lease fees	\$10,575	\$10,575	0.0%	10.1%	0.00
Annualised est'ment costs	\$700	\$700	0.0%	0.5%	0.00
<b>Variable costs</b>					
Maintenance labour	\$5,124	\$6,057	18.2%	4.1%	0.75
Vehicle parts and panels	\$5,411	\$5,692	5.2%	3.0%	0.16
Cleaning	\$240	\$240	0.0%	0.2%	0.00
Tyres	\$1,817	\$2,001	10.1%	1.5%	0.15
Operator's superannuation	\$969	\$1,002	3.4%	0.7%	0.02
Operator salary equivalent	\$12,108	\$12,525	3.4%	9.4%	0.32
Uniforms	\$2,400	\$2,400	0.0%	1.9%	0.00
Other	\$3,102	\$3,216	3.7%	2.4%	0.09
<b><u>Driver expenses</u></b>					
LPG Fuel	\$13,000	\$13,171	1.3%	9.1%	0.12
Bailee driver payments	\$47,374	\$48,957	3.3%	36.8%	1.23
Cleaning	\$2,704	\$2,704	0.0%	2.2%	0.00
<b>Total</b>	<b>\$129,010</b>	<b>\$134,200</b>		<b>100%</b>	<b>4.00%</b>

Note: Weights as at September quarter 1999. Figures may not add due to rounding.

Last year's cost items are shown in Tables 4.1 and 4.2, along with their annual percentage changes, weights and percentage point contributions to the overall rise in the index.

### *Criticism of Taxi Cost Indices*

Stakeholders have criticised both the Taxi Council's original cost index approach and the Tribunal's amendments. In particular, **the weights** allocated to some of the cost items have been challenged. So has the fact that **the dollar sum of the cost items** adds up to more than the revenue a taxi is likely to generate (see discussion on pages 8-9) if operating at industry-standard hours and shifts.

Criticism has also been levelled at an adjustment first made by the Tribunal in 2001 - **the inclusion of bailee driver payments** as a proxy for driver income. Some stakeholders have interpreted this as referring to the driver pay-in. Rather, it is a measure of the driver labour cost involved in operating a taxi. It is an opportunity cost in the sense that it is the minimum remuneration which the (two or more) drivers *must expect to receive* if they are to be induced to "keep the taxi on the road"<sup>23</sup>.

<sup>23</sup> IPART, *Report on fares for taxis, buses and private ferries*, June 2002, p 26.

Were the operator/driver relationship one of employer/employee, the drivers would earn a wage and the Cost Index would show “drivers’ wages” as an operator cost. Further, drivers’ wages would be an accurate description of that payment which induces the drivers to offer their labour. It would also be an accurate description of their actual incomes.

As bailor/bailee is the appropriate characterisation of the operator/driver relationship, “drivers’ wages” cannot be used. Instead, a cumbersome term such as “full cost of bailee drivers’ labour”<sup>24</sup> would have to be used to be both descriptive and accurate. As a form of shorthand which will hopefully eliminate confusion, the Tribunal proposes to call this cost “notional drivers’ wages”. (Actual driver income will usually be different from this depending on the driver’s experience, hours worked and so on.)

Since no meaningful measure of notional drivers’ wages has been available to the Tribunal, it has assumed that it is 36 per cent of total operating costs. This arbitrary allocation of weights was based on previous research into taxi costs done in the ACT. (The initial 40 percent weighting mentioned in the text of the 2001 Determination was a percentage of costs exclusive of plate lease fees, consistent with the ACT analysis. This was reduced to 36 per cent of total costs once plate lease fees were introduced into the Cost Index).

For practical implementation, it was further assumed that the notional wage cost increased at the same rate as average weekly earnings (otherwise drivers would be induced to work elsewhere and the number of taxis on the road would decline).

The Tribunal also expressed concern with other cost items, e.g. network fees. In particular, the Tribunal noted that in the majority of areas outside of Sydney, network services are provided by a monopoly service provider. The Tribunal was unable to satisfy itself that the actual network costs charged were efficient network costs.

Like any base-weighted index, the weights attached to particular cost movements may change significantly over time as the industry adapts to changes in relative prices, technology and other factors. It may be time for the weightings to be reviewed by an outside consultancy, since the weights currently in the base were derived in 1999.

The fact that the absolute dollar sum of the cost items may add up to more than the estimated revenue of a taxi is concerning, although not strictly crucial to the purpose for which the Tribunal uses the Cost Index approach. The Cost Index is not attempting the more arduous task of measuring the absolute cost of operating a taxi (the 2002 review termed this a “cost build-up” approach) but rather how that *cost has most likely changed in the period to which the current review refers*.

That said, the fact that operator-related cost items in the Cost Index sum to well above estimates of driver pay-ins and that total costs exceed apparent total taxi revenue does raise doubts about the validity of the individual cost estimates and hence their weighting.

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<sup>24</sup> IPART, *Report on NSW Taxi Fares*, 2001, p 25.

As for the particular cost movements in the Cost Index, the items included should meet three core criteria:

- the items themselves should be *consistent* with the previous year's cost index, where practicable
- the movements in their prices should be *representative* of the class of costs for which the particular items were selected, and
- the movements in the cost of the item should be *verifiable* by the Tribunal.

***The Tribunal invites comment on the components and weightings currently used in the cost index.***

### *The way forward*

In its final report last year, the Tribunal highlighted some possible developments that might assist the Tribunal in its fare review process and the government in monitoring and regulating the industry. The Tribunal highlighted five things:

- that adjustments to fares based on the cost index should *not* be considered to be an annual, automatic matter
- that a detailed study of cost items should be undertaken if the current regulatory approach is maintained and that a detailed study on industry revenue should be considered
- that efficiency gains need to be encouraged in the industry
- that an ongoing annual information return should be established which includes revenue, cost and performance information
- that performance standards be properly defined, monitored and met.

An issue arising out of the second point is that about 3,000 taxis are operated as stand-alone businesses while another 1,000 or more (the THCB could not be precise) are operated from a 'base' of five or more taxis. That suggests the possibility of a different set of cost items that may be most relevant to a single taxi operation as opposed to a base taxi operation.

***The Tribunal invites comment on each of these matters and the extent to which they might help stakeholders and government better understand and guide the industry in its future development.***

### **4.1.2 Private buses**

Separate cost models have been used to calculate appropriate fares and revenue for commercial and non-commercial contracts for private bus operators.

#### *Commercial contracts*

Over recent years maximum fares for commercial contracts have been regulated using a cost index approach as previously agreed between Transport NSW and the BCA. The existing cost index includes capital costs, people costs, bus insurance and registration, bus lubricants, repairs and maintenance and other costs. Last year's cost index is shown in Table 4.3.

Table 4.3 Private bus cost index change in 2002

Individual Item Costs	Base Weights 1 July 01	Costs		Percentage Change	Contribution to total rise
		1 July 01	30 June 02		
<b>Capital costs</b>					
Mercedes chassis		\$188,067	\$192,206		
Custom coach body		\$143,000	\$170,500		
Bond rate		6.10%	6.32%		
<b>Monthly lease paym't</b>	<b>14.98%</b>	\$6,415.86	\$7,066.22	10.1%	<b>1.52</b>
<b>People costs</b>					
Award rate of pay	42.44%	\$606.60	\$626.26	3.2%	
Superannuation	3.35%	\$48.53	\$56.36	16.1%	
Payroll tax	2.38%	\$40.62	\$40.96	0.8%	
Workers comp.	2.32%	\$33.18	\$37.68	13.6%	
<b>Total</b>	<b>50.49%</b>				<b>2.25</b>
<b>Bus ins/regro</b>					
Greenslips	1.59%	\$2,681.00	\$3,064.71	14.3%	
Compre per \$1000	0.97%	\$8.96	\$12.23	36.5%	
Registrations	0.64%	\$767.00	\$859.00	12.0%	
<b>Total</b>	<b>3.20%</b>				<b>0.66</b>
<b>Bus lubricants</b>	<b>11.63%</b>	\$0.96	\$0.89	-7.1%	<b>-0.83</b>
<b>Repairs/maint</b>					
Major service	4.22%	\$1,072.50	\$1,105.50	3.1%	
Tyres	1.11%	\$639.00	\$658.15	3.0%	
<b>Total</b>	<b>5.33%</b>				<b>0.16</b>
<b>All other costs (CPI)</b>	<b>14.37%</b>	\$130.22	\$134.04	2.9%	<b>0.42</b>
<b>Total</b>	<b>100.00%</b>				<b>4.18%</b>

The Bus Industry Cost Index does not sum all the components to a dollar figure so that it is well understood that it is measuring how bus operating costs have changed in the period under review rather than the absolute level of bus costs. Drivers are also employed and therefore labour costs enter the index in a more straightforward way than is the case for taxis. As with taxis, the Tribunal requires the bus cost items to be *consistent* over time, *representative* of the costs in particular categories and *verifiable* in their price movements.

That said, the weights are still of concern since they do not marry up easily with the dollar amounts of individual cost items. For example, the implied annual cost of running a commercial bus operation is around \$514,000, based on the relation between the lease cost and its weight. If 14.98 per cent is \$76,990 (the 2001 annual lease cost), 100 per cent is almost \$514,000. Further, if the annual greenslip and registration costs were to correspond to their weights, they would “blow up” to much more than their annual values.

Fortunately, as noted in the Tribunal’s 2002 review, the BCA state that “a more comprehensive analysis of the weightings and other concepts in the BICI model will be undertaken before the submission in 2003”<sup>25</sup>.

***The Tribunal invites comment on the components and weightings currently used in the commercial contracts Bus Industry Cost Index.***

<sup>25</sup> BCA submission, April 2002, Attachment 1.

*Non-commercial contracts*

For non-commercial contracts the calculation of the revenue requirement relies on a financial model developed by PricewaterhouseCoopers (PwC) for Transport NSW and the BCA.

The non-commercial model separates bus costs into depreciation, bus-related costs, driver-related costs, fuel, other distance-related costs and a return on investment. GST is added to the net revenue requirement to calculate a total revenue requirement. Individual contract requirements such as kilometres travelled per day (rather than actual performance) are entered into the model, along with general cost adjustments as determined by PwC.

Last year, the Tribunal focused on the general workings, accuracy and consistency of the existing non-commercial model. This year, the model will be examined in some detail.

***The Tribunal invites submissions on the appropriateness of the present non-commercial model as a way of remunerating operators.***

**4.1.3 Private ferries**

Prior to the Tribunal's 2001 review, private ferry fares were determined by Transport NSW, taking into account inflation and STA ferry fares. In the last two years, fares have been set using a cost index approach.

As has been the case in previous reviews of private ferry fares, a pro-forma cost information sheet will be circulated to operators for completion. This pro-forma approach was suggested to the Tribunal by the CVA.

**Table 4.4 Private ferry cost index change in 2002**

<b>Individual Cost Items</b>	<b>Weights</b>	<b>Percentage Change</b>	<b>Contribution to total rise</b>
Labour	39.0%	2.9%	1.12
Fuel	13.9%	-0.9%	-0.13
Repairs and maintenance	15.2%	5.9%	0.89
Insurance	4.2%	29.6%	1.23
Depreciation	5.1%	11.7%	0.60
Interest	4.5%	-6.5%	-0.30
Licensing fees	2.2%	3.7%	0.08
Berthing/mooring fees	2.4%	5.9%	0.14
Advertising	1.6%	40.9%	0.67
Motor vehicle expenses	3.3%	0.3%	0.01
Other	8.6%	8.2%	0.71
<b>TOTAL</b>	<b>100.0%</b>		<b>5.03%</b>

For the last two years, the quality of the data has been poor but the coverage improved considerably in 2002 when five of the seven operators submitted responses (compared to three in 2001).

The Tribunal also noted specific concerns with the private ferry cost index, including the small sample size and the wide divergence of cost increases reported by different operators for the same individual cost items.

***The Tribunal invites submissions on the quality of private ferry data, individual cost components and the appropriateness of the present approach to fare-setting.***

## 4.2 Advantages and disadvantages of the cost index approach

### 4.2.1 Advantages

Key advantages of the cost index approach are that:

- it is conceptually easily understood by all interested parties
- it is relatively undemanding on data collection and analysis for the key stakeholders, and
- it has been the approach used for some years in the taxi, private bus and private ferry industries.

The approach directly links cost rises to price increases in a way that is straightforward – the industry and its customers see it being 'compensated' for the costs it has had to incur in order to provide the services desired.

Such 'cost-plus' pricing is widely perceived to maintain existing profit margins, an outcome which is often perceived to be 'fair' to all parties concerned.

### 4.2.2 Disadvantages

The cost index approach has several disadvantages, as last year's report highlighted. Namely:

- **It ignores potential improvements that might have been achieved, or should be achieved**, within the particular industry. Under a cost index approach, it is very difficult for regulators to create incentives for suppliers that might induce them to implement efficiency improvements. Instead, the incentive may be to mirror the weights in the cost index to reduce risk rather than pursue better service or operating efficiencies.
- **It ignores the revenue side.** If revenues have increased to a greater extent than costs over a particular period, there would appear to be little justification for a fare increase on the basis of a rise in unit costs alone. Faster growth in the economy and jobs that promoted increased patronage and *enhanced* the industry's monopoly power might even present a case for a fare decrease.
- **It ignores the possibility of interaction between revenue and cost sides** of the industry. Higher-than-expected revenues might induce a laxness in cost controls that would normally operate in more stringent times. Granting a large fare increase based on inflated costs would simply 'lock-in' poor cost control and reward the lax behaviour.
- **It only approximates costs on average, at best.** It cannot reflect the circumstances of individual operators.
- **It will almost always lead to fare increases.** In the modern world, the average price level across the economy tends to rise (that is, inflation is entrenched, albeit sometimes at a low rate), and this is usually reflected in most if not all prices of services, including labour, that are inputs in taxi, private bus and ferry costs.

A more technical drawback common to all base-weighted indices is that the base on which it is originally constructed may, over time, move well away from the actual cost structure faced by the industry.

Apart from a periodic update of the weighting pattern for the original components, evolution of the cost structure might well mean that 'new' costs have to be grafted in, and 'old' costs removed from the cost index with one-off adjustments to fares to compensate for any one-off rises or falls in the absolute levels of costs incurred to stay in business.

### 4.3 Alternative approaches

The Minister for Transport specifically asked the Tribunal to identify and assess alternatives to the cost index approach in this year's review. The Tribunal believes there are three main alternatives—using various 'outside' cost indices, indexation with a productivity adjustment, or an 'efficient costs' or building block approach—each of which has an increasing degree of complexity and data input requirements.

#### 4.3.1 Various 'outside' cost indices

The technical drawbacks of an industry-based cost index approach mentioned at the close of the previous section suggest one alternative that requires less data collection and analysis. This is to use published cost or price indices which approximate key costs for the particular industry.

The Australian Bureau of Statistics (ABS), for example, publishes **wage cost data on total hourly rates of pay** by sector, including for Transport and Storage, and by occupation, including Intermediate production and transport workers. By sector, pay rose 3.2 per cent in 2002; by occupation 3.6 per cent in 2002. Either index rise or their simple average could be used as a suitably-weighted proxy for labour costs in the taxi, bus and ferry industries.

The Bureau also publishes a transportation index as part of the CPI series. This index measures, for Sydney households, the changes in prices for motor vehicles, fuel, vehicle repairs and servicing, vehicles parts and accessories and other motoring charges (including urban transport fares). This could be used as a proxy for the non-labour costs in taxi and bus operations. (The inclusion of urban transport fares is a distortion, of course, but the small weight of the item in the CPI basket is likely to limit the size of any distortion.)

A variant on this approach would be to use only the **Sydney transportation index in the CPI**. It rose 3.0 per cent in 2002. Its chief drawback is the absence of a labour cost component. However, that is also a strength as it implicitly recognises the growth in labour productivity that may have occurred in the 'Sydney transportation industry' during the period under review. That recognition is important because labour costs per employee may well have risen strongly and that rise would normally be captured in the Cost Index approach, thus 'justifying' a correspondingly large fare rise.

But if the strong rise in wages or other labour costs reflects reward for a more productive workforce, the rise in output per employee might well be large enough to keep *wage costs per unit of output* (also often called unit wage costs) steady and therefore leave profit margins steady as well. In short, the CPI approach captures industry-wide efficiency gains in the fare-setting process.

An advantage of this approach is that neither industry nor economy-wide productivity growth has to be measured to make it operational. It is also relatively simple to apply.

The main disadvantage with the composite ABS or single ABS approaches is that the various wage and price indices may have internal weighting patterns that do not align very well with a particular industry's cost structure.

For example, the transportation sub-index of the CPI is composed of private motoring costs (specifically, motor vehicles, automotive fuel, motor vehicle repair and servicing, motor vehicle parts and accessories, other motoring charges) and urban transport fares. Transportation has a weight of 14.79 per cent in the Sydney CPI and within the group, private motoring has 13.69 per cent and urban transport fares just 1.1 per cent. That set of weights could hardly be said to reflect the actual cost weightings in the bus or ferry industries.

However, it may be a little more closely related to actual taxi costs. The actual weights within the private motoring sub-group are motor vehicles 5.69 per cent, fuel 3.90 per cent, repair and servicing 2.14 per cent, parts and accessories 0.89 per cent and other motoring charges 1.09 per cent. There are, of course, other large non-labour cost items in the current taxi cost index such as insurance, network fees and plate lease fees.

#### **4.3.2 Indexation with a productivity adjustment**

The second alternative – using indexation with a productivity adjustment - is an elaboration of the outside cost index approach. Under this approach the current level of prices is used as a base. Prices are then adjusted each year by a CPI-X factor, where X is a function of expected productivity movements.

The X factor may be positive or negative. For example, a regulator may consider the appropriate X for a given business to be the difference between productivity growth in the business' particular industry and economy-wide productivity growth. If industry productivity is growing more quickly than economy-wide productivity, the X would be positive and price rises would be lower than the increase in the CPI. In the case where productivity in the particular industry is growing more slowly than economy-wide productivity, the X would be negative and the CPI-X methodology would produce price rises *greater* than the rise in the CPI alone.

This approach is simple to understand and provides financial incentives for companies to pursue efficiency gains. But it requires a current level of prices that is close to efficient, in the view of the regulator. If the base level of prices is inefficient, productivity adjustments alone will not correct this inefficiency over time. Another disadvantage is that it may be difficult to administer if productivity is hard to measure. (The ABS measures trend productivity gains by broad industry sectors; it may be possible to use these as a proxy for particular industries.)

Finally, like the current approach and outside cost indices approach, it cannot ensure the financial viability of the industry participants, nor does it allow for different operating conditions among the companies in the industry.

### 4.3.3 An 'efficient costs' or building block approach

A third approach, which the Tribunal and other regulators use in a range of other industries, typically involves detailed examination of operating and financing costs, and a return on capital invested to reach a view on 'efficient costs'. The Tribunal then determines a level of revenue sufficient to cover efficient costs, with prices calculated by applying demand forecasts to the revenue requirement.

This method is commonly referred to as the 'building block' approach because it builds up blocks of costs, return of capital and return to capital. It is used extensively for industries such as electricity, gas and water and sewerage. Unlike the approaches mentioned above, this approach explicitly allows for the financial viability of the regulated business.

The building block approach only sets revenues/prices for one time period. Price adjustments may be achieved through:

- a new building block calculation for each adjustment period
- an automatic adjustment mechanism (eg CPI-X) or
- a combination of the above.

The building block approach is generally seen as an intrusive, expensive and cumbersome form of regulation where there are many industry participants of widely different size. It requires detailed data on the revenue and cost sides of the industry, often a substantial exercise that requires independent consultancies.

In order to reduce administrative burden, building block determinations are commonly used to set a base level of revenues/prices for a regulatory period, usually five years or more, with annual CPI-X adjustments applied during the period. A full review, including a renewal of building block calculations, is then conducted at the end of the regulatory period.

Such an approach can provide increased certainty and reduced administrative costs, but may be subject to "gaming" as businesses aim to present a distorted picture of business conditions at the time of full review. Potential efficiency gains may be delayed in order to maximise allowable revenue for the business in the next regulatory period. The difficulties relating to calculating an appropriate X factor also apply to this approach.

The most appropriate form of price regulation may depend heavily on the size and complexity of the industry being regulated. For example, a building block approach is readily applied to the gas and electricity industries where there are a relatively small number of large operators, each with public, audited financial accounts and clearly defined and measurable products. In a small industry, such as private ferries, data may simply not be available and it may be prohibitively costly or disruptive to try such an approach. Before recommending any of the alternative approaches, the Tribunal would need to consider the trade-off between their potential benefits and their costs.

***The Tribunal invites comments on the application of various possible fare-setting approaches to the taxi, private bus and private ferry industries.***

## 5 FARE LEVELS AND STRUCTURE

The Tribunal has been asked to consider the appropriate fare levels for taxis, private buses and private ferries. It will take into account that, for a sustainable industry, private operators must earn revenues that recover operating costs and earn a market rate of return on capital. These revenues could be funded by users, by Government through a social policy program, or by a mix of the two. Fare structures and ticket products may also be used to maintain or increase patronage, better match costs and revenue streams and provide more flexible or equitable services.

### 5.1 Taxis: average fare and the balance between components

#### 5.1.1 Current fare level and structure

The Tribunal uses the concept of the 'average fare' in making its overall taxi fare recommendation. This means that the individual fare components may, in principle, be adjusted in any way within an overall fare rise. Table 5.1 shows the current fare structure for urban and country taxi operators.

**Table 5.1 Current fare structure<sup>26</sup>**

	Urban	Country
Flagfall	\$2.55	\$3.05
Distance	\$1.45 / km	\$1.51 / km <sup>1</sup>
Radio <sup>2</sup>	\$1.25	\$0.75
Waiting time <sup>3</sup>	\$37.35 / hr	\$37.35 / hr

Notes

1. The distance rate for country trips over 12km is \$2.11/km.
2. This represents the phone booking charge.
3. Crossover speed 25.75 kph in urban areas; 24.7 kph in country areas.

However, there are four considerations concerning fare components quite apart from their consistency with the overall fare recommendation.

First, NSW taxi meters are constrained in the increments they can accommodate. For example, a \$1.25 increment matches the current booking fee but the 'extras button' cannot accommodate a toll that is not a multiple of \$1.25. No change would work in all circumstances, however, since existing tolls are not multiples of each other - except at impractically small (10 cent) increments.

A similar constraint occurs with waiting time. According to the TWU, Schmidt meters currently book waiting time at five cents every 4.8 seconds. That equates to \$37.50 an hour. That is the closest the meter can come to the current recommended \$37.35 an hour because the meters can only be adjusted to within one-tenth of a second. Were the Tribunal to recommend an increase in the price of waiting time, the rise to five cents every 4.7 seconds implies an hourly rate of \$38.30 (or every 4.6 seconds, \$39.13, and so on). Other brands of meters may have different increment restrictions.

<sup>26</sup> In addition to the details in the table, the fare structure also includes a night-time surcharge, luggage rates and payment of tolls.

## Meterable increments

*The Tribunal will take account of the nearest meterable increment when rounding recommended charges. It therefore invites comment on all meter-related anomalies in the present fare structure.*

Second, the ‘average fare’ is crucially dependent on the average distance travelled and this appears to have changed quite substantially in recent years.

Third, the appropriate ‘balance’ between the components becomes an issue when each component is not adjusted by the same percentage as the overall recommended fare.

Finally, there are ‘extras’ charges that are outside of the average fare calculation (such as luggage charges) and an issue is how these should be adjusted.

### 5.1.2 Average fare

For the purposes of the 2001 and 2002 reviews, the Tribunal adopted an average fare in the metropolitan area of the flagfall, a 10 km trip, 3 minutes of waiting time and 50 per cent of the booking fee. In the country area the average fare was flagfall, 3 km trip, 3 minutes waiting time and 50 per cent booking fee. The ‘average fare’ in urban areas was \$19.54 and in country areas \$9.82, as indicated in Table 5.2.

**Table 5.2 Contribution of components to total ‘average fare’**

	Urban	Country
Flagfall	\$2.55	\$3.05
Distance (10k/3k)	\$14.50	\$4.53
Radio	\$0.63	\$0.38
Waiting time (3mins/3mins)	\$1.87	\$1.87
<b>Total fare</b>	<b>\$19.54</b>	<b>\$9.82</b>

In its submission to the 2002 review the Taxi Council noted that the average urban taxi journey was decreasing. It attributed this to more inner city living, improvements in alternative transport modes and the growth of airport shuttle services in the outer suburbs.<sup>27</sup> The Taxi Council stated, “the distance component of 10 kilometres for the metropolitan ‘average fare’ is no longer sustainable and an average distance of 7 kilometres is more reasonable”.

This view is consistent with data from the Transport Data Centre, which suggests that the average weekday taxi trip by residents in the Sydney area is 7.2 kms.<sup>28</sup> Under the assumptions of a 7.2 km average distance, all other components unchanged, the average urban fare would be \$15.48.

### Formulation of ‘average fare’

*The Tribunal invites comment on the use it is making of the ‘average fare’ concept and the adoption of 7.2km as the appropriate distance for the average urban fare.*

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<sup>27</sup> Taxi Council Submission to 2002 Fare Review, 2 April 2002, p 31.

<sup>28</sup> Transport Data Centre, private communication.

### 5.1.3 The 'balance' within the fare structure

In its 2002 submission, the Taxi Council asserted that “the present balance between flagfall and distance rates has been carefully crafted over decades of experience by the taxi industry” (page 26). The ratio of flagfall to charge per kilometre is around 20 in most Australian jurisdictions (see Table 5.3).

The balance was seen by the Taxi Council as occurring between customers wanting to hire taxis for short and long distances, between drivers who were being induced to accept short and long distance trips and “the cost of presenting the service to the hirer at the kerbside”.

The Tribunal recognises that the current fare structure does not necessarily reflect the costs associated with the provision of each component of the trip, nor does it think that this would be appropriate. Fare structure is probably better related, where possible, to demand-side factors such as what customers are willing to pay or to supply-side factors such as what will induce drivers to take passengers on short trips and to work nights.

In applying an average fare increase across individual components, the Tribunal will seek to be mindful of any impact on patronage. Adverse consequences to specific customer groups and impact on driver and industry revenue will also be considered.

If the recommended fare increase was applied equally across all components, the existing relativities would be preserved.

#### Application of the fare increase to individual components

***The Tribunal invites comment on the historical development of the various components of the taxi fare and the way any overall fare increase should be applied to individual components.***

### 5.1.4 Extra charges

In addition to the average fare structure discussed above, a number of additional charges apply. These include the night-time surcharge (to encourage drivers to work nights), luggage rates (to compensate drivers for extra fuel and/or service) and payment of tolls.

A 20 percent surcharge to the distance rate applies between 10 pm and 6 am in both urban and country areas. For carriage of luggage there is no charge up to 25 kg, then 10 cents for each subsequent 25 kg up to a maximum charge of 55 cents. For urban fares, all road, bridge, ferry and tunnel tolls, and the return tolls for northbound journeys across Sydney Harbour are payable. For country fares, all road, bridge, ferry and tunnel tolls are payable.

The Taxi Council argues that in practice it is difficult to assess the weight of luggage. It has proposed a per piece fee, with the first two pieces free of charge.<sup>29</sup> Whilst this simplifies the charging of the fee, it raises the question: what constitutes 'luggage' and why charge for it?

#### Extra charges

***The Tribunal invites comment on the imposition of the extra charges, and the form the luggage charge should take.***

<sup>29</sup> Taxi Council Submission to 2002 Fare Review, 2 April 2002, p 30.

### 5.1.5 Wheelchair Accessible Taxi (WAT) fare structure

The fare structure described above is also applicable to wheelchair accessible taxis. However, WAT drivers are limited to a charge of 15 minutes waiting time, allegedly to compensate them for the extra time involved in serving wheelchair-bound passengers. The full 15 minutes of waiting time equates to \$9.34. Oddly, standard taxis may charge unlimited waiting time.

The Tribunal notes that one of the recommendations of the 1999 review of the taxi industry was the introduction of an additional \$5 pick-up fee to be paid to the drivers of WATs.<sup>30</sup> If such a fee were introduced, the Tribunal would need to consider the removal of the waiting time allowance. The introduction of specific WAT performance measures to determine the effect of the lift fee also warrants consideration.

The South Australian Department of Transport has introduced a scheme whereby drivers earn \$6 for picking up mobility-impaired customers within 13 minutes of their booking time.<sup>31</sup> The Victorian government also funds a \$6.60 loading fee.<sup>32</sup>

The Tribunal recognises there are other issues with WATS such as the low level of utilisation by the general public and the reluctance of the disabled to book via the 0200 booking service, but these issues are beyond the scope of the Tribunal's review.

#### WAT fare structure

***The Tribunal invites comment on whether an additional lift fee should apply to wheelchair accessible taxis and how it should be implemented.***

The remaining sections provide some interstate and international comparisons which may help readers in formulating their comments on various issues relating to fare structures and other matters.

### 5.1.6 Fare components – interstate review

The taxi fares for NSW and for capital cities around Australia for daytime, single hirings of standard taxis are shown in the top half of Table 5.3. The bottom half of the table highlights some of the relativities between the different components. Some things of note are:

**Waiting time.** Waiting time rates range between \$22.50 per hour (Tasmania) and \$37.35 per hour (NSW). In most cases, waiting time applies only when the taxi is waiting for a passenger. In NSW and Victoria waiting time also applies in service when speed falls below a certain level (25.8 kph in NSW and 20 kph in Victoria).

**Phone booking charges.** NSW, Vic, Qld and the ACT have separate booking charges.

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<sup>30</sup> IPART, *Review of the taxi cab and hire car industries*, Final report, 24 November 1999, p 46.

<sup>31</sup> The scheme only applies to holders of SA Taxi Subsidy Scheme vouchers, which are broadly similar to vouchers issued under the NSW Taxi Transport Subsidy Scheme.

<sup>32</sup> Ian Kowalick, *Assessment of the access cabs system*, November 2001, p 50.

Table 5.3 Interstate fare component comparisons

	Sydney	NSW Country	Canberra	Melbourne	Perth	Adelaide	Brisbane
Flagfall	\$2.55	\$3.05	\$3.20	\$2.80 <sup>1</sup>	\$2.90	\$2.40	\$2.50 <sup>2</sup>
Distance (per km)	\$1.45	\$1.51	\$1.28	\$1.31	\$1.17	\$1.18	\$1.25
Radio	\$1.25	\$0.75	\$0.65	\$1.10	-	-	\$1.00
Waiting Time (per hour)	\$37.35	\$37.35	\$28.50	\$27.00	\$33.60	\$23.40	\$31.58 <sup>3</sup>

**Selected ratios**

	Sydney	NSW Country	Canberra	Melbourne	Perth	Adelaide	Brisbane
Flagfall/Distance	1.8	2.0	2.5	2.1	2.5	2.0	2.0
Flagfall/Radio	2.0	4.1	4.9	2.5	-	-	2.5
Waiting time/Distance (i.e. implied crossover speed)	25.8 kph	24.7 kph	22.2 kph	20.6 kph	28.7 kph	19.8 kph	25.3 kph

## Notes

1. Includes first 76.34 metres of journey.
2. Includes first 102.7 metres of journey.
3. Exact calculation is 10 cents per 11.4 seconds.

**Flag-fall versus distance rates.** The ratio of flag-fall to distance (as measured by price charged per kilometre) varies between the states and territories. For weekday 'day' tariffs, the ratio varies between 1.75 (NSW) and 3.04 (Darwin, not shown in Table 5.3).

**'Day' versus 'night' rates.** All states and territories have higher tariffs for nights and weekends, although the division between 'day' and 'night' differs. The form of the 'night' surcharge also differs: in some cases it is a higher distance rate (NSW); in others a higher flag-fall rate (such as Victoria where an additional \$1.10 flat rate applies between midnight and 6am); and in still others both are higher.

**Multiple hirings.** Some states have different rates for multiple hirings and maxi taxis (carriage of 6 or more passengers). Currently in NSW, rates for maxi taxis are negotiable between the driver and occupants. In the ACT and Victoria maxi taxi hirings are 150 per cent of the rate for standard hirings.

Table 5.4 presents fare changes in Australian capital cities since July 1999. Other jurisdictions have used CPI changes and/or a taxi cost index in adjusting fares.

The percentage changes between states are not necessarily consistent with each other. For some states the percentage change relates to an average fare. In other cases, the percentage increase may have been applied to a single component of the fare (usually distance charge). In short, the average fare may have risen to a greater or lesser extent than shown.

Although there is some commonality between cost structures between states, different operating environments can be expected to produce different cost and fare outcomes.

**Table 5.4 Changes to taxi fares since 1 July 1999**

	Change %	Timing		Change %	Timing
NSW	5.1	November 1999	NSW	5.1	November 1999
Urban	7.8	July 2000 – GST	Country	8.1	July 2000 – GST
	4.1	July 2001		4.2	July 2001
	4.6	July 2002		4.0	July 2002
	<b>23.4</b>	<b>cumulative</b>		<b>23.1</b>	<b>cumulative</b>
Vic	5.8	September 1999	SA	4.2	July 2000
	4.6	May 2000		7.3	July 2000 – GST
	8.0	July 2000 – GST		3.1	January 2001
	9.0	December 2000		4.23	Dec 2001
	<b>30.3</b>	<b>cumulative</b>		<b>20.15</b>	<b>cumulative</b>
Tas	1.6	December 1999	ACT	7.7	July 2000
	9.7	July 2000		7.9	July 2000 – GST
	7.2	July 2000 – GST		5.5	July 2001
	3.8	December 2000		<b>22.6</b>	<b>cumulative</b>
	<b>24.0</b>	<b>cumulative</b>			
Qld	7.0	Dec 99	WA	7.4	July 2000 – GST
	6.86	July 2000 – GST		8.4	December 2000
	13.0	Nov 2000		<b>16.4</b>	<b>cumulative</b>
	<b>29.2</b>	<b>cumulative</b>			

### 5.1.7 Cost components – international review

The international evidence is sparse, both on the rationale for the pricing of different components of taxi trips and analyses of the relative costs of these different components.

The Tribunal has not been able to identify any international research that addresses these topics directly, and only one article, now twenty years old, that addresses them indirectly. It is surprising that so little research appears to be available internationally, given that setting the relative fare components is a common issue faced by taxi companies and regulators.

### 5.1.8 Taxi fare elasticity – international review

International evidence on taxi fare elasticities is presented in Attachment 2.

The **quantity** of evidence is very limited – by contrast to the public (mass) transport sector, for which hundreds of fare elasticity estimates are available world-wide. This relative lack of evidence reflects the structure of the taxi industry and limited systematic record-keeping.

The **quality** of much of the evidence is open to question since some of the estimates are based on very short time series for a single city, some are based on data for a single firm in a city with more than one taxi firm (such estimates assume that market shares are constant) and some are based on the effect of a single fare change.

Different taxi sub-markets also appear to exhibit widely-differing elasticity values (more so than for the urban public transport market in general). Hence interpretation of elasticity results requires understanding of the sub-markets represented; this information is often not provided. It would be reasonable to expect a lower elasticity for business travel, for instance, than for other, more discretionary, travel.

For the overall market, the majority of studies give elasticities in the range  $-0.2$  to  $-1.0$ . A common conclusion from similar reviews is that the typical fare elasticity for the overall market is around  $-0.8$  to  $-1.0$ .

While an overall value of around  $-0.8$  is reasonably well supported by the literature, it appears on the high side (in absolute terms) of the majority of Australian and European evidence. This might suggest a typical value as low as  $-0.3$  to  $-0.4$ . (Such a value would be much closer to typical fare elasticities established for urban public transport services generally).

Elasticities could also be expected to vary according to:

- the absolute level of taxi fare (relative to prices of competing modes and elsewhere in the economy); elasticities tend to increase with absolute fare level
- the closeness of other mode substitutes, eg the standard of the public (mass) transport system.

No evidence has been found on:

- Any differences between elasticities for passenger trips and for passenger kilometres. With increasing fares, it might be expected that some taxi users would make shorter taxi trips, so that elasticities with respect to passenger kilometres, and hence revenue, would be greater than those with respect to numbers of trips taken.
- Any elasticity difference between prices for different trip components, eg flagfall, distance charge and booking fee.

## 5.2 Private buses: fares relative to STA bus fares

### 5.2.1 Fare levels

Transport NSW sets the maximum fares that can be charged by private operators. They are distance based fares set across four areas of operation:

- Metropolitan
- Urban fringe
- Country town
- Rural.

An example of actual fares for metropolitan passengers is shown in Table 5.5. A section is 1.6 kilometres.

**Table 5.5 Comparison of single fares**

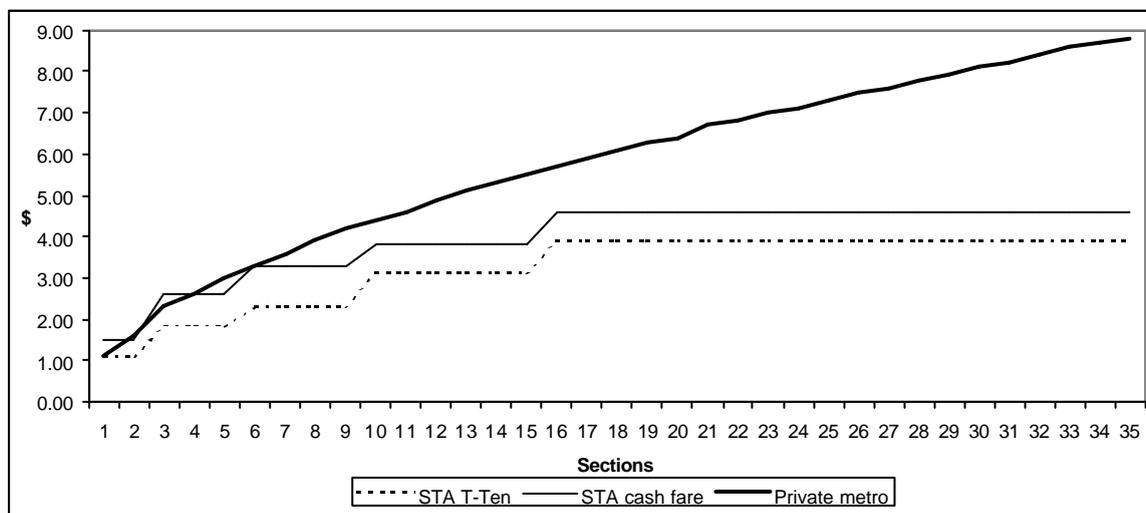
Section	Distance (kms)	Max Full Adult Fare	Westbus Adult Fare	Busways Adult Fare	STA Adult Fare*
1	1.6	\$1.10	\$1.10	\$1.10	\$1.50
2	3.2	\$1.70	\$1.70	\$1.70	\$1.50
3	4.8	\$2.40	\$2.40	\$2.40	\$2.60
4	6.4	\$2.70	\$2.70	\$2.70	\$2.60
5	8	\$3.10	\$3.10	\$3.10	\$2.60
10	16	\$4.60	\$4.60	\$4.20	\$3.90
15	24	\$5.70	\$5.30	\$4.80	\$3.90
20	32	\$6.70	\$5.80	\$5.00	\$4.70

Source: BCA

\* Single Cash Fares

Private bus operators' fares appear to be broadly comparable to Sydney Buses' single cash fares for short distance trips, although they are significantly higher for the longer distance trips (Figure 5.1).

**Figure 5.1 Comparison of STA and maximum private metro bus single fares**



Note: Fares for private operators extend up to 70 sections.

However, this comparison is misleading. Only 18 per cent of STA users buy single cash tickets. TDC data for 2000 show that 25 per cent of STA passengers use TravelTens and 17 per cent use TravelPasses. These tickets are priced at a substantial discount to single full fares.

The size of the discount varies, but it is between 25 per cent and 30 per cent for up to nine sections of travel using TravelTens on STA buses. The average length of a weekday trip on STA buses for full fare paying passengers was 6.4 kilometres in 2000, or four sections. STA fares, therefore, are substantially lower for most travellers, on average, than private operators' fares for all distance bands.

Only a small proportion (approximately 0.9 per cent) of Sydney Buses' patrons travel 16 sections or more. Travellers on private buses generally travel longer distances on average,<sup>33</sup> but very few travel in the very long distance bands.<sup>34</sup> This is partly due to the fact that the majority of private bus trips are 'feeder services' which take travellers to another mode of transport.

Private bus operators are able to offer fares below the maximum allowed, although the Tribunal is not aware to what extent operators charge lower fares than the maximum. The Tribunal notes that metropolitan operators BusWays and WestBus both charge prices below the regulated maximum, particularly for distances greater than 6 sections (see Table 5.5).

## 5.2.2 Ticket products

Sydney Buses offer a range of multiride (TravelTens) and multimodal weekly tickets, which are offered at a discount to equivalent single cash fares. For private buses the main ticket product is the single cash fare, although some operators offer weekly tickets which are combined with rail travel.

Sydney Buses also offers a wider range of concession tickets, as part of the Government's social policy program. For example, holders of a pensioner's or senior's card can purchase a \$1.10 excursion ticket for all day travel on all STA and CityRail services. Pensioners only receive a half-fare concession for single tickets on private bus travel.<sup>35</sup>

In 2001/02 the STA received reimbursement from Transport NSW of \$107 million for concession passengers, \$68 million for community service obligations and \$36 million for SSTs. It also received a capital grant of \$22 million.<sup>36</sup>

### Private bus fare structure

***The Tribunal invites comments on the existing fare structure for private buses, including the range of tickets on offer and relativities with Government-owned buses.***

<sup>33</sup> Transport Data Centre data indicate that the average weekday trip distance on STA buses was 6.2 kilometres in 2000 compared to 7.6 kilometres for private bus operators (see NSW Department of Transport – Transport Data Centre, *Bus users in Sydney*, December 2002, p 4).

<sup>34</sup> Based on data from May 1999 the BCA estimates that approximately 86 per cent of full fare paying passengers purchase fares of less than 7 sections.

<sup>35</sup> It is important to note that different government funding arrangements apply to public and private operators. Whereas public operators receive government reimbursement for the \$1.10 excursion ticket, private operators do not.

<sup>36</sup> Transport NSW Annual Report 2002 p 75.

### 5.3 Private ferries: fares relative to STA ferry fares

Existing adult one way fares for each of the private ferry operators are:

- Hegarty's ferries (\$4.50 adult): Circular Quay, McMahons Point and Kirribilli wharves<sup>37</sup>
- Matilda Cruises:
  - (\$4.50 adult): Cockle Bay – Aquarium Wharf – Circular Quay
  - (\$4.50 adult): Circular Quay – Lane Cove river wharves
  - (\$4.50 adult): Darling Harbour – Bayview Park – Cape Cabarita – Cabarita Point – Kissing Point – Homebush Bay
- Church Point ferry service (\$4.50 adult): Scotland Island – Morning Bay
- Clarence River Ferries (\$4.20 adult): Iluka – Yamba
- Cronulla and National Park Ferries (\$3.30 adult): Cronulla – Bundeena
- Dangar Island ferry service (\$3.60 adult): Brooklyn – Dangar Island
- Palm Beach Ferries:
  - (\$4.50 adult): Palm Beach – Patonga, and Palm Beach – Mackerel Beach – Currawong – Basin – Bonnie Doon
  - (\$5.00 adult): Gosford – Woy Woy
  - (\$7.50 adult): Palm Beach – Ettalong

In its 2002 determination, the Tribunal set these maximum fares<sup>38</sup> for STA's Sydney Ferries services:

- Inner zone 1<sup>39</sup>: \$4.30
- Inner zone 2: \$4.50
- Manly and Rydalmere: \$5.40
- Parramatta: \$6.40
- Manly JetCat: \$6.70.

Generally, the fares for private ferry operators are lower than those for Sydney Ferries.<sup>40</sup>

Fare increases for Sydney Ferries were greater than those of private operators until 2000 (eg Table 5.6). Sydney Ferries offers a much wider range of ticket products compared to private ferry operators, including multiple tickets (FerryTens), plus weekly TravelPasses that offer multimodal travel on CityRail and/or bus services. TravelPasses can also be purchased for quarterly or yearly travel.

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<sup>37</sup> \$3.40 was the maximum adult fare set for the former Hegarty's Ferries. The Tribunal has been advised by Transport NSW that a higher maximum fare of \$4.50 has been set for the new operators.

<sup>38</sup> Fares are for a single, adult journey. Concession fares are half the adult fare, rounded down to the nearest 10 cents.

<sup>39</sup> In 1996/97 inner harbour fares were split into two zones to improve the relationship between fares and distance travelled. Zone 1 covers journeys up to 10km. Zone 2 applies to journeys over 10km, currently only Meadowbank.

<sup>40</sup> The Tribunal notes that fare differences may be justified on a number of grounds, including length of trip, and service quality. The Tribunal has not been able to consider in detail such information.

Table 5.6 Recent fare increases

Church Point		Sydney Ferries	
Date	Increase	Date	Increase
Jul 96	3.30 %	Jul 96	5.30 %
Jun 97	2.00 %	Jun 97	4.20 %
Aug 98	2.25 %	Jul 98	3.30 %
Nov 99	2.00 %	Aug 99	14.30 %
Jul 00	8.60 %	Jul 00	8.60 %
Nov 01	6.70 %	Jul 01	5.00 %
Jul 02	5.00 %	Jul 02	2.00 %

Alternative ticket products offered by private ferries are more limited. However, the operators in Sydney Harbour offer some multiple ride/discount tickets. Matilda Cruises offers weekly commuter passes, plus student term passes at a 20 per cent discount for students ineligible for the SSTS. The Tribunal has not been provided with information about other private operator ticketing practices.

#### Private ferry fare structure

***The Tribunal invites comments on the existing fare structure for private ferries, including the range of tickets on offer and relativities with Government-owned operations.***



## 6 SERVICE QUALITY

Under the terms of reference for this review, the Tribunal is required to consider issues of service quality.

The term 'service quality' can refer to a wide range of desirable outcomes for consumers. Aspects of service quality include the quality of the service itself and various indicators of reliability. The highest possible quality is not necessarily the most efficient, however, since better service involves costs and trade-offs must be made between service quality and cost (and hence price).

The outcomes consistent with acceptable service quality are best defined, measured, monitored and enforced by means of key performance indicators (KPIs). Such KPIs vary from industry to industry, depending on the nature of the services being provided.

The definition, measurement, monitoring and enforcement of service quality by means of KPIs has not been well developed within the current regulatory framework under which the private bus and private ferry industries operate. The BCA commissioned outside consultants to develop a service quality index for private buses. This index, or something like it is yet to be incorporated into current regulations. Bus and ferry reform is expected to tackle some of these long-standing service issues.

By contrast, the taxi industry appears acutely aware of its levels of service, perhaps because taxis derive their revenue almost exclusively from full fare paying passengers and they compete directly with other modes of transport.

### 6.1 Performance requirements

#### 6.1.1 Taxis

Transport NSW currently has in place interim standards for authorised taxi network operators. These interim standards were introduced in 1993, with the expectation that more stringent standards of performance would be introduced after a phased introduction of one year.

Transport NSW has indicated to the Tribunal that the draft performance standards which will replace the current interim measures are still under negotiation with the taxi industry. The adequacy of the reporting requirements associated with these performance standards has also been questioned.

##### *Metropolitan performance standards*

The required performance standards are separated into those relating to operations, telephone answering standards, delivery standards and customer services. Due to their direct effect on customers, the Tribunal has focussed its attention on telephone answering and delivery standards. In relation to telephone answering standards, requirements include:

- 90 per cent of calls to be connected to the booking service immediately
- of these, 70 per cent are to be answered within 1 minute
- and 90 per cent answered within 2 minutes.

In relation to delivery standards, requirements include:<sup>41</sup>

- 85 per cent arrival within 15 minutes of booking being made
- 98 per cent arrival within 30 minutes of booking being made
- 100 per cent arrival within 60 minutes of booking being made.

### *Country performance standards*

For telephone answering standards, the country requirements are the same as those for metropolitan network providers. In relation to delivery standards, requirements include:

- 85 per cent arrival within 10 minutes of booking being made
- 98 per cent arrival within 15 minutes of booking being made
- 100 per cent arrival within 20 minutes of booking being made.

These performance requirements are tighter than those applying to metropolitan network operators.

Transport NSW requires performance reports to be submitted by network operators every three months. The Tribunal was provided with these quarterly reports by the Taxi and Hire Car Bureau for the twelve months ending December 2002. These reports broadly indicated that the telephone answering targets were met by each of the taxi companies. Taxi companies did not perform as well in meeting delivery standards.<sup>42</sup>

The Tribunal has some concerns over the level of compliance with the current reporting obligations and the robustness of the data reported. The Taxi and Hire Car Bureau was unable to provide the Tribunal with quarterly reports for each taxi network. Therefore, an industry-wide picture of performance levels was unobtainable.

Further, the data collected suggested significant variation in performance levels in consecutive reporting periods. For example, one network reported 82.5 per cent of taxis arrived within 15 minutes of a booking in the quarter ending December 2002, compared to 96.5 per cent in the preceding quarter. While this discrepancy might reflect a busy pre-Christmas period, another network operating in the same area reported 90 per cent of pickups were within 15 minutes for both periods.

### *Transport NSW surveys of the taxi industry*

In March 1998 Transport NSW commissioned a report on taxi usage and the level of satisfaction of taxi users with taxi services in Sydney.<sup>43</sup> It indicated that the overall level of satisfaction with taxi services was high. However, it suggested a relatively low quality of service in relation to waiting time, whether after a telephone booking, or at ranks or on the street. In addition to these waiting time aspects of service quality, service quality was rated as relatively poor for driver knowledge of the area and driver proficiency in English. Ratings of 'poor' or 'very poor' totalled over 10 per cent for these aspects of service quality.

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<sup>41</sup> These standards apply to the provision of normal services in metropolitan areas. Any minimum performance standards contained in contracts for special purpose taxis or fringe area services will override these 'general' standards for metropolitan areas.

<sup>42</sup> Transport NSW has indicated to the Tribunal that it has some reservations about the accuracy of some of the information it currently receives from some network operators.

<sup>43</sup> NSW Department of Transport – Transport Data Centre, *Sydney taxi customer survey*, Report no 98/4, April 1998. This is the most recent survey of taxi customers.

Transport NSW also conducted a 1999 survey of taxi drivers and operators in NSW. Although it did not directly measure service quality, it covered some areas that potentially influence the quality of the taxi service, eg length of driver experience and training.

#### *Transport NSW complaints register*

The eight most common complaints, identified individually in Table 6.1, account for approximately 80 per cent of the total number of complaints received. The remaining 20 per cent of complaints received, presented below as 'other', comprise in excess of 20 different types of complaint.

**Table 6.1 Summary of complaints registered with Transport NSW**

	1999	2000	2001	2002
Abuse, assault or rudeness	835	806	697	646
Driving in a dangerous manner	392	320	524	420
Refuse hire when 'for hire'	735	556	472	383
Demand more than prescribed fare	287	638	387	329
Fail to arrive/arrive late	487	459	344	260
Fail to take shortest route	277	254	236	229
Vehicle unfit/unclean	220	229	222	194
Poor knowledge	365	228	161	121
<i>Total of complaints listed above</i>	<i>3598</i>	<i>3490</i>	<i>3043</i>	<i>2582</i>
Other	979	812	764	572
<b>Total</b>	<b>4577</b>	<b>4302</b>	<b>3807</b>	<b>3154</b>

**Source:** THCB.

The complaints data collected by Transport NSW indicates that the total number of complaints received has fallen by 30 per cent between 1999 and 2002. The incidence of the most common complaint, driver abuse, assault or rudeness towards passengers, has fallen 23 per cent over the past three years, and there has been similar reductions in complaints regarding driver's refusal to take passengers when 'for hire', late arrivals and failure to arrive after bookings and poor driver route knowledge.

The complaint category 'driving in a dangerous manner' has registered an increase in the number of complaints, moving it up to the second most common complaint in 2002. The frequency of the complaint 'demanding more than the prescribed fare' has also increased.

Transport NSW has advised the Tribunal that it intends to roll out an internet based complaints management system in the next 12 months. The Customer Feedback Management System will be linked directly to the individual taxi networks, with the aim of overcoming the current lack of information. Transport NSW has informed the Tribunal that they expect the number of complaints recorded to increase substantially with the introduction of this system, not because incidents are more frequent, but because the ease of access to the system should net more responses.

## Service quality - taxis

***The Tribunal invites comments on the quality of service offered by taxis, and the adequacy of the current performance and reporting standards.***

### 6.1.2 Private buses

Performance standards in relation to service quality are in place for private bus operators with commercial service contracts and with non-commercial contracts. The extent to which these standards are monitored and enforced is unclear to the Tribunal.

#### *Standards for commercial service contracts*

Transport NSW enters into commercial contracts for the provision of route and school services in designated areas or along specified routes. Bus operators carry regular full fare and half fare passengers as well as school students.

The commercial contract provides conditions of operation including the provision of:

- routes, fare schedules and timetables
- minimum service levels as specified by Transport NSW
- a management information system to enable monitoring of compliance with standards of service
- a complaints register.

For commercial contracts, service level requirements are specified in the Minimum Service Level (MSL) policy. The MSL policy sets standards for:

- service frequency: a minimum quantity of service that must be provided in each contract area
- service coverage (spatial): ensures that most parts of each contract area are within a certain distance of a route
- service coverage (temporal): states the times that services must be available throughout the day, evening and weekends.

In metropolitan areas MSL standards are based primarily on the net patronage potential in a contract area. The net patronage potential is based on the population size, the number of private vehicles and the degree of alternative public transport options in the contract area. The MSL can therefore vary significantly between contract areas.

For the non-metropolitan commercial services route coverage and frequency standards are set for four different types of services: country town services; village to town services; country town to town services; and urban fringe services. The MSL standards for service frequency and service coverage can vary significantly between the four different service types as well as due to the different population size in the contract areas.

In 1997, the PTA was amended to introduce a Performance Assessment Regime. Under the PAR, the renewal of a contract for a commercial operator would be dependent on the meeting of a series of best practice objectives and standards. The Tribunal understands that the PAR requirements have not been implemented.

### *Standards for non-commercial contracts*

The non-commercial contracts relate to contracting bus services for transporting students to school, where a commercial bus service is not available. The majority of these contracts are associated with non-metropolitan areas.

Like commercial contracts, non-commercial contracts specify service performance requirements, by which operators are to provide services. These include service capacity, service punctuality, driver standards and timetable. Non-commercial contracts also include specific information relating to exact routes to be followed.

### *Performance against the standards*

In the past the Tribunal has found it difficult to assess private operators' performance against conditions in their contract, due to the lack of information. In 1999, the BCA commissioned a study by the Institute of Transport Studies to assess the quality of services being provided by bus operators. The study identified 13 attributes of service quality.

The BCA has previously indicated that service quality has improved and notes that one of the indicators is the increased frequency of services in contract areas. The BCA also believes that kilometres travelled and hours worked by bus operators have increased.

In the 2001 and 2002 fare reviews, the Tribunal noted the delays in implementing the performance assessment regime as required in the PTA (discussed in section 6.2 below). In the interim, the Tribunal suggested a limited set of data be collected to assist it to gain a better understanding of the performance of private bus operators. The Tribunal notes that the performance assessment regime may be superseded by a program of bus and ferry reform as discussed in section 6.2.

The Tribunal understands that a financial viability study of metropolitan private buses is currently underway and that results from that study should be available for consideration at the workshop to be held on 26 June 2003. How much light the study sheds on issues of service quality remains to be seen.

## **Service quality – private buses**

***The Tribunal invites comments on the quality of service offered by private buses and the adequacy of the current performance and reporting standards.***

### **6.1.3 Private ferries**

Under the PTA 1990 ferry operators are given exclusive operating rights for five years and ongoing contract renewal for a specified route or region if they meet the terms and conditions of their service contracts. Transport NSW has only had to issue commercial contracts to ferry operators.

Commercial contracts are provided in areas where there are a range of existing ferry services which can be operated on a commercial basis. Ferry operators are permitted to carry regular full fare and half fare passengers as well as school students.

The contract provides conditions of operation including the provision of:

- routes, fare schedules and timetables
- minimum service levels as specified by Transport NSW
- information on scheduled journeys that have failed to operate
- notification to Transport NSW and passengers of changes to services.

Service level requirements are specified in minimum service levels (MSL). In the PTA 1990 'service levels' are defined as the:

- periods of time during which services are to be operated and
- frequency and extent of operation of services during the specified period of time.

The commercial contracts for ferry operators specify MSLs that must be provided by the ferry operator. This primarily involves maintaining the service frequency as specified in the timetable and providing services on the routes specified in the contract.

Although operators do periodically provide limited performance data to Transport NSW, the Tribunal has not sighted the data. The Tribunal does however look forward to analysing this data prior to the release of its final determination. A rough analysis of service frequency between private operators in Sydney Harbour and Sydney Ferries indicated that this aspect of service levels may be comparable. Sydney Ferries, however, does offer a slightly broader range of tickets, such as TravelPass tickets that allow travel on other modes of transport.

### **Service quality – private ferries**

***The Tribunal invites comments on the quality of service offered by private ferries.***

## **6.2 Bus and ferry reform**

Transport NSW is currently conducting a bus and ferry reform review to consider the nature of the regulatory and contracting framework and the performance assessment of operators.

Transport NSW has informed the Tribunal that it is working to identify alternative options for the contracting of bus services to facilitate, amongst other things, improved minimum service levels, greater flexibility, a stronger focus on patronage growth, optimum value for money, enhanced data collection and improved performance reporting. This review is being carried out by a consultant appointed by Transport NSW with a view to implementing similar changes for private ferries.

Although a Performance Assessment Regime has not yet been implemented, the current bus reform process will include consideration of performance assessment and the basis for the renewal of contracts. As far as the Tribunal is aware, no date has been established for the completion and implementation of the bus and ferry reform program.

## 7 OTHER ISSUES

The terms of reference require the Tribunal to take account of the potential environmental and social impacts of the fare recommendations. These factors will need to be considered when setting fares.

### 7.1 Environmental issues: public transport externalities

Because public transport is a viable alternative for many travellers to private motor vehicles, its benefits accrue well beyond those gained by its users. For example, users of private cars, bikes and pedestrians benefit from the reduced congestion and pollution that public transport brings.

The full extent of the benefits from such 'externalities' is very difficult to measure. A glimpse of how large they might be can be gleaned from some anecdotal evidence. The RTA estimates that during the morning peak hour 8am to 9am, the Harbour Bridge bus lane carries 13,500 people by bus, taxi, hire car and motorbike. This compared with about 1,900 for each of the other southbound lanes and about 13,000 people who travel south across the bridge by train.<sup>44</sup>

Sydney commuters already use buses and trains more than commuters in the other mainland eastern states. For example, of 1.5 million journeys to work made on census day, 7 August 2001, Sydney commuters made 242,000 trips by train (15.8 per cent of total trips), 136,000 trips by bus (8.9 per cent) and 800 by light rail (0.1 per cent). Over 1,047,000 trips (68.3 per cent) were made by car only, either as the driver or as a passenger, and 78,000 (5.1 per cent) either rode a bicycle only or walked only. Other ways of getting to work included truck, taxi and motorbike.

In Melbourne on census day, 9.2 per cent of commuter trips were made by train, 2.3 per cent by bus and 2.4 per cent by tram. Almost 1,032,000 trips (80.0 per cent) were made by car and 50,000 (3.9 per cent) rode a bicycle only or walked only. In Brisbane, the comparable trip figures were 7.1 per cent by train, 5.8 per cent by bus, insignificant by light rail, 78.2 per cent by car and 4.1 per cent biked or walked.<sup>45</sup>

The extent to which the external benefits of public transport can be optimised depends on the responsiveness of private vehicle users to inducements to switch to public transport (including taxis). This responsiveness in turn varies with such factors as relative travel price, relative travel time, car parking fees, relative accessibility, relative service quality and frequency and reliability of public transport.

To maximise external benefits, prices for some forms of public transport have often been set much lower than full cost recovery would require. Without a comprehensive understanding of the size of these external benefits, it is difficult to determine how much lower than full cost recovery public transport fares should be set. At some point, the gains in the external benefits that come from inducing more people to travel by public transport are likely to be offset by the increased cost associated with providing those services.

<sup>44</sup> Transport Data Centre, [www.transport.nsw.gov.au/tdc/queries.html](http://www.transport.nsw.gov.au/tdc/queries.html), Commonly Asked Questions.

<sup>45</sup> ABS website, 2001 Census, Basic Community Profiles and Snapshots, Statistical Regions, Method of Journey to Work.

The majority of available evidence suggests that price has only a small near-term influence on the decision to use public transport. Other issues such as service quality, timeliness, frequency, convenience, safety and accessibility are likely to be more important determinants of public transport demand.

Over the longer-term, people are more responsive to price changes but again the significant influences on public transport use remain such non-price factors as the geographical spread of the population, accessibility to public transport, and the convenience and price of car travel (involving the price of fuel, car parking fees and the price of private motor vehicles).

### **Environmental issues**

***The Tribunal invites comments on environmental issues and how these should be considered in the fare setting process for taxis, private buses and private ferries.***

## **7.2 Social impacts: personal and household incomes**

The terms of reference of these reviews require the Tribunal to consider the social impacts of its recommendations. The Tribunal has, in the past, sought available information on which to assess the social impact of its public transport pricing determinations. The process indicated that existing information was limited for making such an assessment.

When examining this issue in the past, the Tribunal has relied on information collected and presented by Transport NSW's Transport Data Centre.<sup>46</sup> This year the Tribunal has been able to supplement TDC data with ABS census data.

Such information provides a useful first step at gaining background information on the characteristics of users of all modes of public transport and assessing any social impact. This remark applies least, however, to private ferries because of the small sample size for private ferry users in the surveys by the Transport Data Centre (TDC).

Below are several tables and figures based on data provided by the TDC and ABS. They are presented here to give background against which readers may wish to comment on, and draw out implications for, the possible social impacts of fare changes.

### **7.2.1 Published TDC data on private bus trip characteristics**

In *Bus Users in Sydney, Issues Paper 2002/02*, December 2002, the TDC indicates that, in carrying residents of the Sydney Statistical Division in 2000, private buses provided 40 per cent of all bus trips during the week and 21 per cent of the weekend trips.

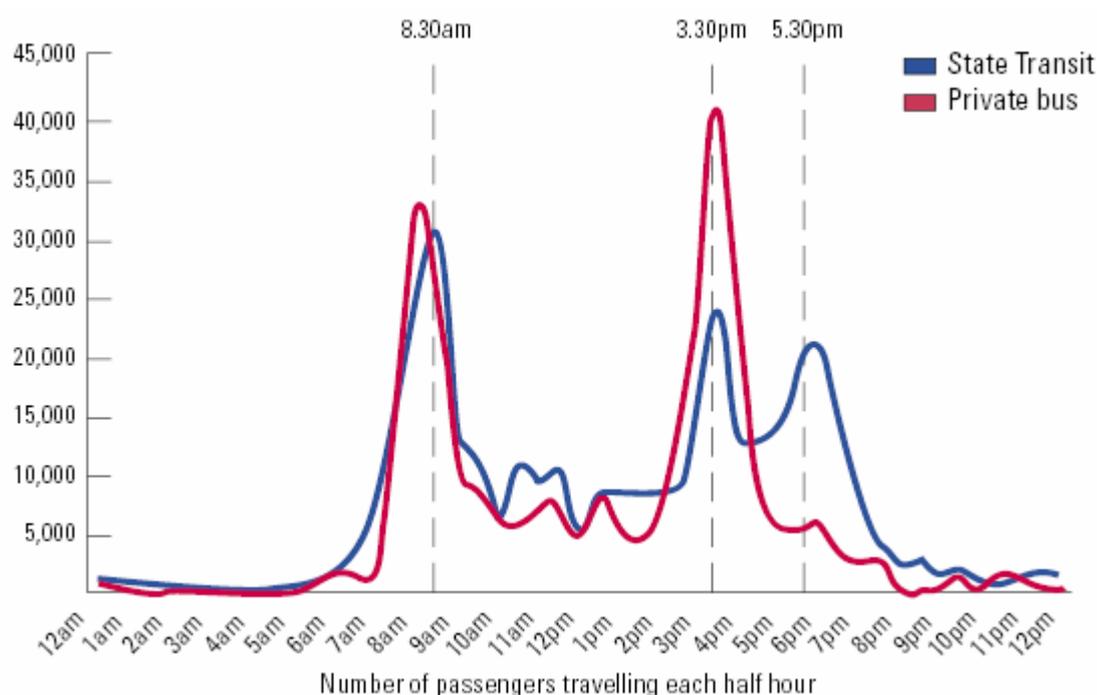
Education/childcare are given as the reason for 52 per cent of the private bus trips; commuting 15 per cent. The remainder of the trips are taken mostly for social/recreation reasons and for shopping (especially on weekends).

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<sup>46</sup> NSW Department of Transport – Transport Data Centre, *Bus users in Sydney*, Issues paper 2002/02, December 2002.

Sydney's private buses face a morning peak near 8:30am and an afternoon peak at 3:30pm, both related to the movement of school children (see Figure 7.1 - the STA afternoon double peak reflects movements of students and, later, commuters). Not surprisingly, on weekends the peak (for both private and STA buses) is around 12:30pm.

**Figure 7.1 Through-the-weekday demand for buses**



Source: Transport Data Centre, *Bus Users in Sydney*, December 2002.

As to average trip distance, private bus travellers rode an average 7.6km per weekday trip in 2000. That is longer than the average STA bus weekday trip of 6.2kms. For weekends the two figures were 11.0km and 5.6km respectively.

On average trip duration, private bus trips lasted on average 23 minutes during the week and 28 minutes on weekends. STA bus trip times were two minutes less during the week and eight minutes less on weekends.

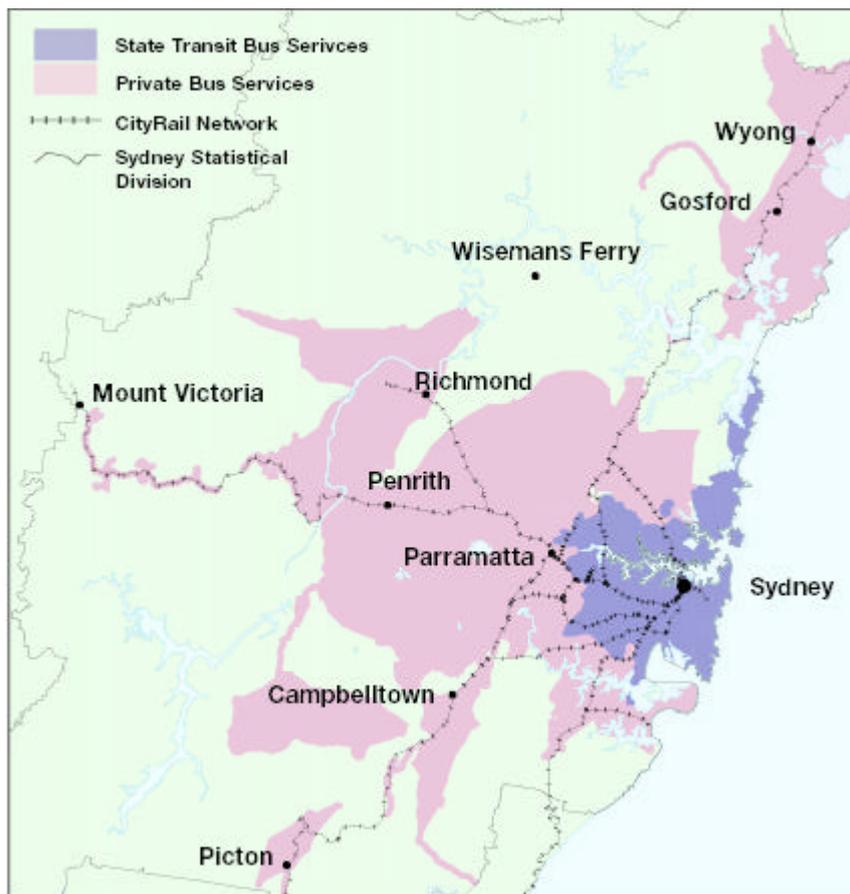
As for multi-rides, 92 per cent of private bus passengers either walked to their bus stop or were driven to it. Once at their bus journey's end, 19 per cent caught a train and 3 per cent caught another bus. The remaining 78 per cent walked to their final destination.

Only 20 per cent of private bus trips were made by full fare paying passengers; 45 per cent travelled under the SSTS and 20 per cent were concession travellers. The balance was children or no fare was required.

By ticket type, 45 per cent used a student pass and 40 per cent purchased a single ticket. In contrast, 25 per cent of STA bus travellers bought TravelTens and 17 per cent bought weekly tickets. Only 13 per cent used school passes and only 18 per cent bought single tickets.

STA and private bus companies serve different demographic and socio-economic markets, in general reflecting the different geographic regions they cover (Figure 7.2, over).

Figure 7.2 Areas serviced by STA and private buses in 2000



Source: Transport Data Centre, *Bus Users in Sydney*, December 2002.

### 7.2.2 Income data from the Australian Bureau of Statistics

The 2001 census collected median weekly income by individuals. Table 7.1 indicates how weekly and annual income varies by local statistical areas serviced by STA and private buses. Table 7.1 is not a table of the income of bus users, of course, but of the median income of all residents in each local statistical area.

Table 7.1 Individual weekly and annual income by ABS statistical local areas

STA areas are:	Median weekly individual income	Annual income	BCA areas are:	Median weekly individual income	Annual income
Ashfield	437	22724	<i>Auburn</i>	292	15184
<i>Auburn</i>	292	15184	Bankstown	337	17524
Botany Bay	392	20384	Baulkham Hills	542	28184
Burwood	371	19292	Blacktown North	490	25480
<i>Canterbury</i>	325	16900	Blacktown Sth-East	384	19968
Concord	487	25324	Blacktown S-W	359	18668
Drummoyne	586	30472	Blue Mountains	417	21684
Hunter's Hill	517	26884	Camden	495	25740
Marrickville	467	24284	Campbelltown	397	20644
Lane Cove	644	33488	<i>Canterbury</i>	325	16900
Leichardt	652	33904	Fairfield	282	14664
Manly	622	32344	Hawkesbury	448	23296
Mosman	773	40196	Holroyd	388	20176
North Sydney	824	42848	Hornsby	502	26104
<i>Pittwater</i>	544	28288	Ku-ring-gai	580	30160
Randwick	489	25428	Liverpool	400	20800
Rockdale	395	20540	Parramatta	393	20436
Ryde	470	24440	Penrith	443	23036
South Sydney	569	29588	Sutherland - East	501	26052
Strathfield	394	20488	Sutherland - East	516	26832
Sydney Inner	941	48932	<i>Warringah</i>	518	26936
Sydney Remainder	565	29380	Woolondilly	416	21632
<i>Warringah</i>	518	26936			
Waverley	599	31148			
Willoughby	602	31304			
Woolhara	766	39832			

Some areas serviced by both STA and private buses are shown in italics in Table 7.1. The Tribunal has included these areas in the STA calculations.

The median annual income in the median suburb in STA-serviced areas is \$26,884 (median suburb: Hunter's Hill) which is about 15 per cent more than the \$23,296 median (in the median suburb: Hawkesbury) in the private bus-serviced areas. The first quartile numbers are \$20,540 (Rockdale) for the STA serviced areas which is 10 per cent above the \$18,668 (Blacktown South West) private bus-serviced areas.

The weighted arithmetic average of annual individual incomes in the STA-serviced areas is \$26,827. That is 20 per cent higher than the \$22,253 average of private bus-serviced areas.

### 7.2.3 Other income data from the TDC

TDC data reworked by the Tribunal sheds light on incomes of users by mode of transport. Table 7.2 shows personal and household incomes reported by full fare paying users in 2000.

Median household income is lower than arithmetic average household income for all modes because all the high income users pull up the arithmetic averages. For this reason, the Tribunal considers the median a better representation of 'average' income since, by

definition, 50 per cent of users have incomes below the median and 50 per cent have incomes above it.

**Table 7.2 Full-fare paying passengers by income (various measures), Sydney**

<b>Full fare payers in 2000</b>	<b>No. of trips (average weekday)</b>	<b>Personal Income</b>	<b>Average Household Income</b>	<b>Median Household Income</b>
Priv Buses Syd	73,873	\$28,009	\$63,266	\$58,032
Syd Buses	259,559	\$39,876	\$78,800	\$60,476
Syd Ferries	22,691	\$52,041	\$81,772	\$60,476
CityRail	497,262	\$41,230	\$77,720	\$65,728
Taxis	119,132	\$55,261	\$103,977	\$78,676

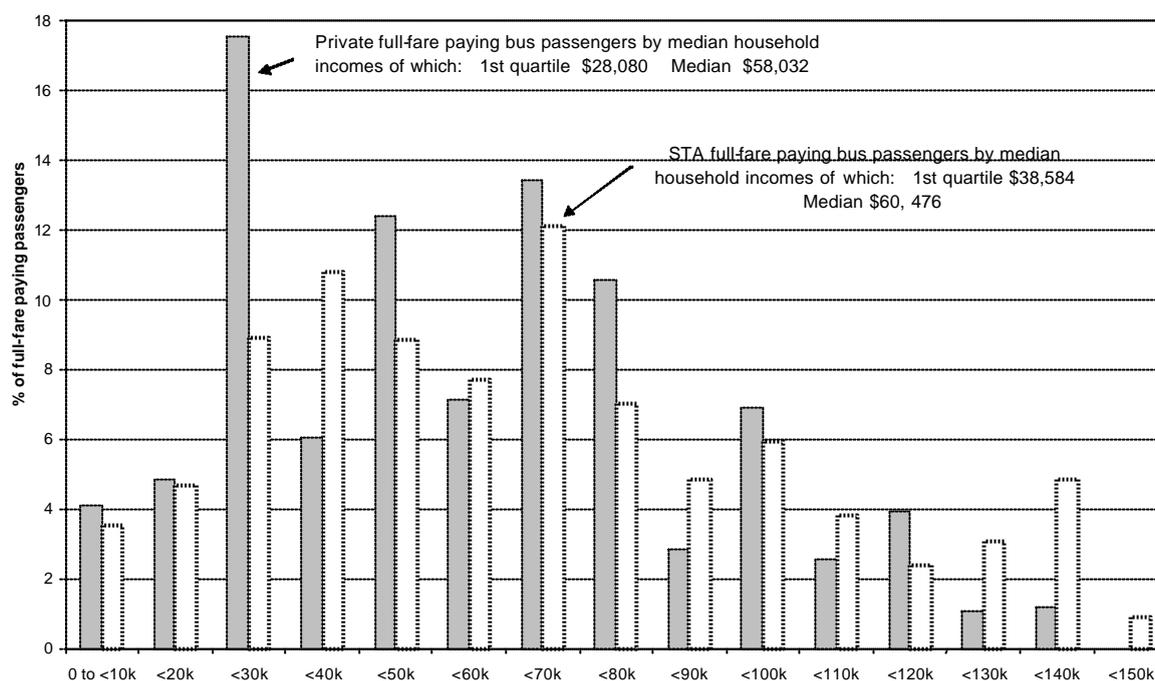
Source: Transport Data Centre, Household Travel Survey 2000. The median household incomes for Sydney bus and ferry users are coincidentally the same in that the median falls in the same range and is ascribed the same value.

Despite similar median household income, relatively more full fare paying passengers on private buses have incomes lower than their STA counterparts. This is best indicated by Figure 7.3 which shows how passengers who use private and STA buses vary by their levels of household income. In particular, a higher proportion of private bus passengers have household incomes below \$30,000 a year. (Figure 7.3 has been truncated at \$150,000 to enhance readability).

Specifically, 25 per cent of private bus users (that is, the first quartile) have incomes of \$28,080 or less. Only 16.3 per cent of STA full fare payers have incomes of \$28,080 or less. The first quartile for STA users is reached at \$38,584.

The actual distribution of the number of full fare paying passengers by household income is shown in Table 7.3.

Figure 7.3 By household income, full fare paying passengers on private &amp; STA buses



Source: Transport Data Centre, Sydney Statistical District. Private bus passengers are shown by the grey columns, STA bus passengers by the white columns. The ranges are each \$10,000 wide eg “<40k” means \$30,000 to less than \$40,000 in household income.

Table 7.3 Household income of full fare paying private bus passengers, Sydney

Household Income:		No. of trips on average weekday
\$0	to <10,000	3,045
\$	20,000	3,571
\$	30,000	12,959
\$	40,000	4,463
\$	50,000	9,151
\$	60,000	5,266
\$	70,000	9,915
\$	80,000	7,782
\$	90,000	2,098
\$	100,000	5,096
\$	110,000	1,891
\$	120,000	2,895
\$	130,000	1,034
\$	150,000	619
\$	200,000	3,337
\$200,000	<350,000	752
		<b>73,873</b>

Source: Transport Data Centre, Household Travel Survey 2000.

The incomes of public transport passengers are difficult to compare with the incomes of Sydneysiders as a whole because travellers are weighted towards commuters and school children. These two groups are at the opposite ends of the personal income spectrum. The ABS data on median individual income in the Census covers the whole population.

That said, for Sydney, the population-weighted average of the ABS measure is \$24,108 for 2001. That is obviously well below the average of the personal income of *full fare paying* passengers in Table 7.2 and it is even below the average of the personal income of *all* train, bus and ferry travellers, excluding those under 15 years of age, at \$26,715 in 2000.

These data do not answer the question: do Sydney's public transport travellers have higher average personal incomes than the population as a whole simply because proportionally more of them are employed? To answer this question the Tribunal would like to compare the average personal income of employed public transport travellers with the median individual income of employed Sydney residents. The latter may be available when the ABS releases its Working Population Profile data on 19 June 2003.

#### **7.2.4 Taxi fare changes and social impacts**

Residents who use taxis the most are people in full-time and part-time work, as Table 2.3 indicated in the chapter on industry characteristics.

The Tribunal is also aware of the importance of taxi transport to particular community groups. For example, some people with disabilities may be reliant on taxi travel as other forms of public transport are not a viable alternative. Some people within this group would have access to the government's taxi transport subsidy scheme.

Although they are required to pay a minimum of 50 per cent of the taxi fare, the scheme does suggest a limited impact of any fare increase on this group.

#### **7.2.5 Bus and ferry fare changes and social impacts**

For private bus and ferry users, half fare concessions are available for holders of student, unemployed, Seniors' and pensioner cards. The Government also provides funding under the School Student Transport Scheme for students travelling to and from school. This will help limit the social impacts of fare increases on eligible school students and their families.

Outside Sydney, private buses are often the only form of public transport available.

#### **Social impacts**

***The Tribunal invites comments on the potential social impacts of fare increases, and how such issues should be considered in the fare setting process.***

## ATTACHMENT 1 TERMS OF REFERENCE

### A1.1 Terms of reference for taxis

I, Bob Carr, Premier, approve, under Section 9(1)(b) of the *Independent Pricing and Regulatory Tribunal Act 1992*, the Tribunal entering into an arrangement with the Minister for Transport to investigate and report on the prices for taxi services regulated under the *Passenger Transport Act 1990*.

A final report is to be provided to the Minister for Transport by June each year.

In conducting this investigation, the Tribunal should consider:

- i. the cost of providing the services concerned;
- ii. the protection of consumers from abuses of monopoly power in terms prices, pricing policies and standards of service;
- iii. the need for greater efficiency in the supply of services so as to reduce costs for the benefit of consumers;
- iv. the impact of pricing policies on borrowing and capital requirements and, in particular, the impact of any need to renew or increase relevant assets;
- v. the need to maintain ecologically sustainable development;
- vi. the social impact of the recommendations;
- vii. standards of quality, reliability and safety of the services concerned (whether those standards are specified by legislation, agreement or otherwise and any suggested or actual changes to those standards as notified to the Tribunal by the Minister for Transport); and
- viii. the effect of any pricing recommendation on the level of Government funding.

In conducting the investigation the Tribunal may consult with the Taxi Council and the relevant unions by arrangement with the Department of Transport.

## A1.2 Terms of reference for private buses

I, Bob Carr, Premier, approve, under Section 9(1)(b) of *the Independent Pricing and Regulatory Tribunal Act 1992*, the Tribunal entering into an arrangement with the Minister for Transport to investigate and report on the following matters related to the private bus industry:

1. fares for regular services regulated under the *Passenger Transport Act 1990*
2. level of remuneration received from the Government for commercial and non-commercial school services.

A final report is to be provided to the Minister for Transport by June each year.

In conducting this investigation, the Tribunal should consider:

- i. the cost of providing the services concerned;
- ii. relativities with the Government owned bus services, including in terms of service, efficiency, cost and ticketing products;
- iii. the protection of consumers from abuses of monopoly power in terms of prices, pricing policies and standards of service;
- iv. the need for greater efficiency in the supply of services so as to reduce costs for the benefit of consumers;
- v. the impact of pricing policies on borrowing and capital requirements and, in particular, the impact of any need to renew or increase relevant assets;
- vi. the need to maintain ecologically sustainable development;
- vii. the social impact of the recommendations;
- viii. standards of quality, reliability and safety of the services concerned (whether those standards are specified by legislation, agreement or otherwise and any suggested or actual changes to those standards as notified to the Tribunal by the Minister for Transport); and
- ix. the effect of any pricing recommendation on the level of Government funding provided to private operators under commercial and non-commercial contracts.

In conducting the investigation the Tribunal will invite submissions from the Bus and Coach Association, the relevant unions and other stakeholder groups, including the general community.

### A1.3 Terms of reference for private ferries

I, Bob Carr, Premier, approve, under Section 9(1)(b) of the *Independent Pricing and Regulatory Tribunal Act 1992*, the Tribunal entering into an arrangement with the Minister for Transport to investigate and report on the following matters relating to the private ferry industry:

1. Fares for regular services regulated under the *Passenger Transport Act 1990*.
2. Level of remuneration received from the Government for school student services delivered under commercial contracts.

A final report is to be provided to the Minister for Transport by June each year.

In conducting this investigation, the Tribunal should consider:

- i. the cost of providing the services concerned;
- ii. relativities with the Government owned ferry services, including in terms of service, efficiency, cost and ticketing products;
- iii. the protection of consumers from abuses of monopoly power in terms of prices, pricing policies and standards of service;
- iv. the need for greater efficiency in the supply of services so as to reduce costs for the benefit of consumers;
- v. the impact of pricing policies on borrowing and capital requirements and, in particular, the impact of any need to renew or increase relevant assets;
- vi. the need to maintain ecologically sustainable development;
- vii. the social impact of the recommendations;
- viii. standards of quality, reliability and safety of the services concerned (whether those standards are specified by legislation, agreement or otherwise and any suggested or actual changes to those standards as notified to the Tribunal by the Minister for Transport); and
- ix. the effect of any pricing recommendation on the level of Government funding provided to private operators under commercial and non-commercial contracts.

In conducting the investigation the Tribunal will invite submissions from the private ferry operators, the relevant unions and other stakeholder groups, including user groups.



## ATTACHMENT 2 EVIDENCE ON TAXI FARE ELASTICITIES

TAXI FARE ELASTICITIES – INTERNATIONAL EVIDENCE				
Country/ City	Study	Date	Elasticity Results	Notes, Comments
UK, London	UK Ministry of Transport (1953), cited in Frankena and Pautler (1984)	London, 1951-52	-1.0 or less (in absolute value)	Considerable doubt on validity of this estimate – see Beesley ME (1979) below. Report's author notes that estimate "needs to be supported by more evidence than is presently available"
UK, London	Beesley ME (1979)	Re-analysis of London taxi data, 5 large taxi companies, 1951-52 (as used in UK Ministry of Transport, 1953).	-0.35	'Base crude' estimate from data (cf UK Ministry of Transport, 1953).
USA, Washington DC	Wong (1971), cited in Frankena & Pautler (1984)		-1.4	
USA, Chicago	Kitch et al (1971), cited in Frankena & Pautler (1984)		-0.8	No test of significance given.
USA	Fravel and Gilbert (1978), cited in Frankena & Pautler (1984)	14 taxi companies nationwide, 1976-77	Median -0.2 Range -1.5 to +1.5	
USA, Pennsylvania	Brown and Fitzmaurice (1978), cited in Frankena & Pautler (1984)	21 PA cities with population 12,000 – 129,000	-0.8	Not significant at 10% level.
USA, Seattle	Applied Economics Associates (1978) cited in Frankena & Pautler (1984)	1977	-1.0	No test of significance given.
USA, Danville (ILL)	McGillivray (1979), cited in Frankena & Pautler (1984)	Danville (pop 143,000), 1975-77	-0.6	Shared-ride taxi service.
USA, New York	Schaller B (1997)	Econometric analysis of NY City data 1990-1996.	-0.22	Estimate highly significant (adjusted $R^2=0.94$ , t-value on fare coefficient = 7.75).
France, Paris	Orfeuil and Hivert (1989), cited in BTRE Database	Travel Paris – Orly Airport	-0.5	Also assessed car v taxi time cross-elasticity.
Netherlands	Rouwendaal et al (1998), cited in BTRE Database	SP survey, 356 potential taxi users regarding mode choice for 3 trip types: 7 kms business trip, 8 kms 'evening out' trips and 4 kms to railway station trip	Bus travel 0.76 'Going out' - 1.75 'Going to station' -0.69 Average -1.14	Mode choice elasticities only. SP approach may tend to overstate response. Also assessed elasticities wrt travel time and response time.
UK, 4 cities	Mackie PJ and Toner JP	SP and TP surveys of taxi users in 4 UK cities, to explore trade-offs between waiting time, walking time, vehicle type and fare. Involved street interviews with taxi users & self-completion postal questionnaire to people at taxi ranks.	'Captives' -0.3 'Non-captives' -1.9 Overall -0.8	Relates to results of 'best' of 4 surveys (SP on-street interviews). 'Captives classified as those travelling at night or with significant amounts of luggage. Results are mode choice elasticities only. Comments that "it seems reasonable to conclude that the price elasticity of demand is probably at about unity for the traffic in aggregate, although this will differ accordingly to the balance of trade in the district between day time & night time; the availability of alternative modes and the proportion of business travellers".
Australia, Canberra	Booz Allen Hamilton (2003)	SP survey of modal choice in ACT, to derive public transport demand elasticities	-0.36	Assumed zero elasticity for people using company charge cards. Remainder of market 'quite elastic'. Results are mode choice elasticities only.
Australia, Queensland	Queensland Transport (2000)	Not known	-0.36 Brisbane -0.50 other centres	Source of estimates not given

Source: Booz Allen and Hamilton. Detailed references available from IPART on request.



## ATTACHMENT 3 ABBREVIATIONS

<b>ABS</b>	Australian Bureau of Statistics
<b>BCA</b>	The BCA or Bus and Coach Industrial Association is the peak industry organisation for the NSW private bus and coach sector.
<b>CVA</b>	The CVA or Charter Vessel Association of NSW is the peak industry organisation for the private ferry industry.
<b>PAR</b>	The PAR or Performance Assessment Regime comprised a series of best practice objectives and standards that private operators were required to meet for renewal of their contracts. This is in the process of being superseded by Transport NSW's program of bus and ferry reform.
<b>PTA</b>	Passenger Transport Act 1990
<b>RTA</b>	Roads and Traffic Authority, NSW
<b>SRA</b>	The SRA or State Rail Authority is the government-owned provider of CityRail train services.
<b>SSTS</b>	SSTS or School Student Transport Scheme provides subsidised travel for eligible school students on government rail, government and private bus and ferry services and long distance coaches. The scheme can only be used for travel between home and school.
<b>STA</b>	The STA or State Transit Authority is the government-owned provider of bus and ferry services in Sydney and Newcastle.
<b>THCB</b>	The Taxi and Hire Car Bureau is the NSW government agency responsible for licensing and regulating taxi cabs and private hire car vehicles in New South Wales. It operates as a division of Transport NSW.
<b>TDC</b>	The TDC or Transport Data Centre is the major source of transport data for NSW. TDC is a division of Transport NSW.
<b>TTSS</b>	TTSS or Taxi Transport Subsidy Scheme was introduced in 1981 in order to promote accessibility for people who cannot use public transport because of a disability. It operates by subsidising 50 per cent of the taxi fare up to a maximum of \$30. This scheme allows people with a serious and permanent disability to travel by taxi for work, study, medical treatment and leisure activities.
<b>WAT</b>	Wheelchair Accessible Taxi.