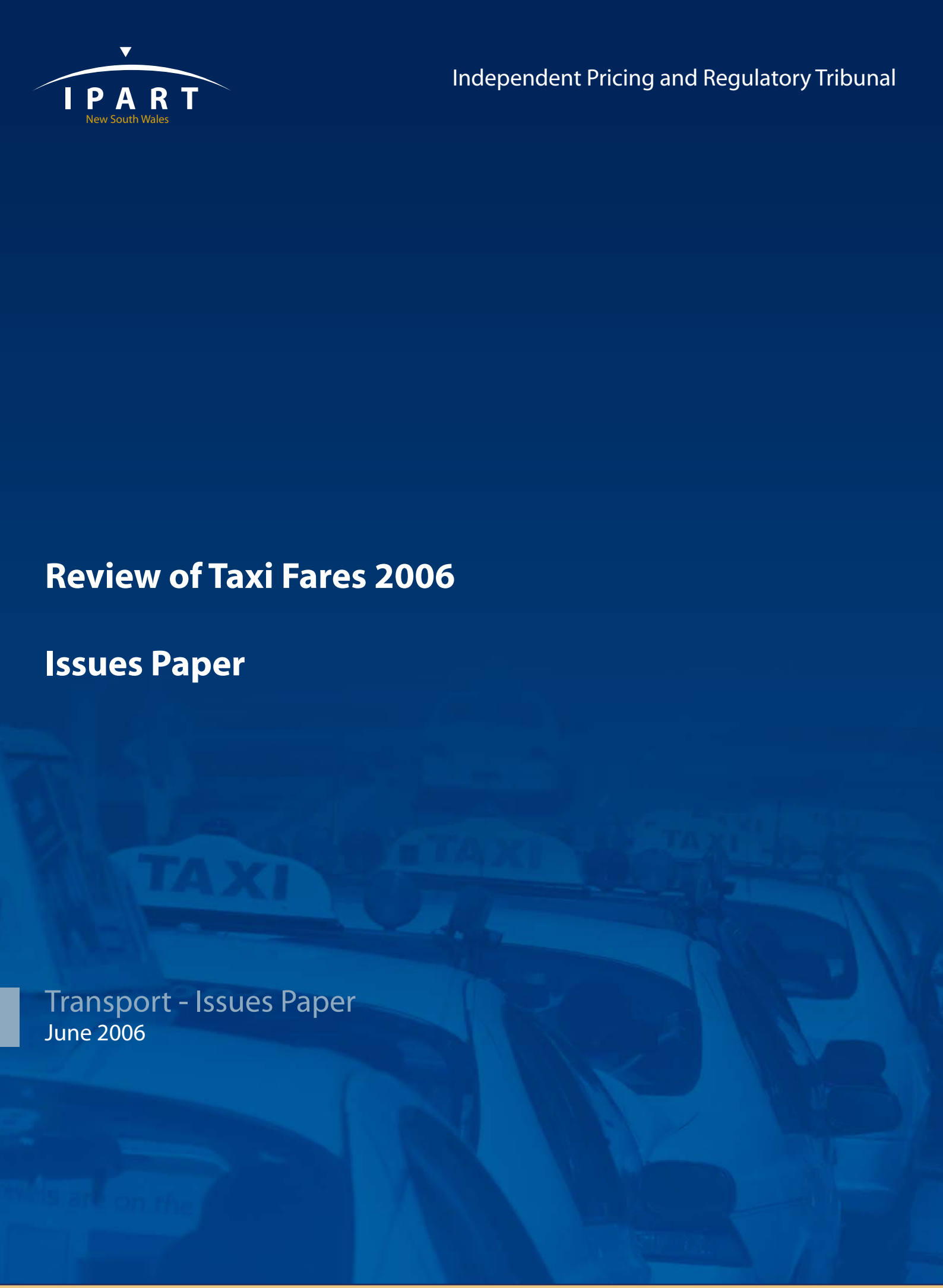
IPART
New South Wales

Independent Pricing and Regulatory Tribunal

Review of Taxi Fares 2006

Issues Paper



Transport - Issues Paper
June 2006

Review of Taxi Fares 2006

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Discussion Paper DP84

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Request for submissions

Submissions are invited from interested parties. 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 from the time of processing of the submission until 3-4 weeks after the release of the final report of an inquiry. The Tribunal may exercise 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).

Submissions must have regard to the specific issues that have been raised. There is no standard format for preparation of submissions. Interested parties may either submit electronic submissions or hard copy submissions.

Submissions must be received by **30 June 2006**.

Submissions should be sent to:

Review of Taxi Fares 2006
Independent Pricing and Regulatory Tribunal
PO Box Q290
QVB Post Office NSW 1230

Email: ipart@ipart.nsw.gov.au

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If you want your submission, or any part of it, to be treated as confidential, please indicate this clearly. The Tribunal may include in its publications a list of submissions received during the course of a particular review or inquiry. It may also refer to submissions in the text of its publications. If you do not want your submission or any part of it to be used in any one of these ways, please indicate this clearly. A request for access to a confidential submission will be determined in accordance with the *Freedom of Information Act* and section 22A of *the Independent Pricing and Regulatory Tribunal Act*.

Privacy

All submissions will be treated in accordance with the *Privacy and Personal Information Act 1998*. Any personal information you give us will not be reused for another purpose.

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.

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1 INTRODUCTION

In response to a request from the Premier, the Independent Pricing and Regulatory Tribunal of NSW (the Tribunal) investigates the fares charged for taxi services regulated under the *Passenger Transport Act 1990* every year, and reports its findings to the Minister for Transport.[1]

As part of this year's investigation, the Tribunal asked a range of stakeholders within the taxi industry to propose how taxi fares should change in 2006/07. It received and considered 11 submissions, which are available on the Tribunal's website. In addition, the Tribunal has undertaken its own review of the approach currently used to adjust taxi fares in line with changes in the costs of providing taxi services, and identified several alternative approaches.

The Tribunal now seeks comment from all interested parties on the various alternatives, prior to making its recommendations to the Minister for Transport.

1.1 Purpose of this Issues Paper

This issues paper explains the context and key issues for the Tribunal's investigation, to assist stakeholders in making their submissions:

- Chapter 2 provides an overview of taxi fare regulation, and explains why the Tribunal has decided to consider alternative approaches for adjusting taxi fares to account for increases in the costs of providing taxi services
- Chapter 3 sets out five alternative approaches and discusses the advantages and disadvantages of each
- Chapter 4 explains the need to account for increases in productivity when adjusting taxi fares, and discusses several approaches for doing this
- Chapters 5 and 6 discuss a proposal from the Taxi Drivers Association to establish a fund for improving security measures for taxi drivers, as well as a range of other issues the Tribunal would like to consider as part of its 2006 review.

1.2 Timetable for the review

The Tribunal intends to further consider the options for adjusting taxi fares, as well as the other issues discussed in this paper, taking into account the comments it receives from stakeholders. It will then prepare a report to the Minster for Transport, setting out its findings and recommendations. An indicative timetable for the review is provided below.

Indicative review timetable

Task	Timeframe*
Release issues paper	8 June 2006
Receive submissions from stakeholders	30 June 2006
Provide report to the Minister for Transport	Early August 2006

* Please note that these dates are indicative and may be subject to change.

[1] The Premier's request was made in accordance with section 9(1)b of the *Independent Pricing and Regulatory Tribunal Act 1992*.

Details on how to make a submission can be found at the front of this report, on the page facing the Table of Contents.

2 OVERVIEW OF TAXI FARE REGULATION

The Tribunal reviews taxi fares annually, using the powers provided under Section 9 of the *Independent Pricing and Regulatory Tribunal Act 1992* (the IPART Act), and in accordance with the terms of reference provided by the Premier on 4 November 2002. These terms of reference require the Tribunal to:

- investigate the need for maximum taxi fares to be adjusted, taking into account the cost of providing the services concerned, the efficiency of these services, the quality and reliability of these services, and the need to protect consumers from monopoly power
- report its findings and recommended changes to maximum taxi fares to the Minister for Transport. (See Attachment 1 for the complete terms of reference.)

The main benefit of regulating maximum taxi fares is that it ensures that passengers are charged according to a known fare scale, and so are protected from price gouging. The Tribunal's role in investigating and reporting on prices for taxi fares reflects the Government's continuing commitment to an independent and expert determination of fares, providing the travelling public and transport providers with certainty over the fare review process.

For the 2006 review of fares, the Tribunal intends to consider adopting a new approach for adjusting taxi fares. To allow further consultation on this, it has sought approval from the Premier to extend the 2006 deadline for reporting to the Minister for Transport from June to August 2006. The following sections provide an overview the taxi industry, the current fare schedules, and the approach the Tribunal has used to date to determine changes in the costs of providing taxi services and recommend fare adjustments.

2.1 Taxi industry

Taxi fares must compensate a number of participants in the taxi industry for the costs they incur in providing taxi services, including those relating to their investment of time and capital. The main industry participants are the taxi licence or 'plate' owners, taxi operators, taxi networks and taxi drivers. (See Box 2.1 for an overview of each of these participants.)

Within the NSW industry, various combinations of these participants operate taxi services. For example, some operators run a fleet of taxis for a host of different investors/plate owners, utilising bailee driver labour. However, others own their own taxi licence and vehicle, and operate and drive it themselves. There is no standard operating structure in the taxi industry.

2.2 Current fare schedules

There are currently two taxi fare schedules operating in NSW:

- the 'urban' fare schedule that covers Sydney, Central Coast, Newcastle and Wollongong
- the 'country' fare schedule that operates in the remainder of the state.

Tables 2.1 and 2.2 show the current maximum fares prescribed by each of these schedules, and compare them to the maximum fares that have applied over recent years. The tables also show the cost of an average taxi fare, based on the Tribunal's calculations and information provided by industry stakeholders and the Transport Population and Data Centre of the NSW Department of Planning. The fare schedules apply to all taxi-cab services as defined in the *Passenger Transport Act 1990*[2], including standard taxis (white cabs), premium taxis (such as Silver Service taxis), Wheelchair Accessible Taxis (WATs) and Maxi Taxis (minivans that can accommodate up to 11 passengers).

Box 2.1 Participants in the NSW taxi industry

Taxi licence owners

Taxi licence or 'plate' owners own a taxi plate purchased either on the secondary market or from the Ministry of Transport (MoT). Currently, Sydney taxi plates are valued at around $280,000, while the value of plates in country areas varies from as little as $30,000 to more than $300,000 depending on the operating area.

There are approximately 6,100 taxi plates in NSW, which are owned by around 5,000 licence owners. All licence owners must be licensed by the MoT. Many licence owners do not operate a taxi themselves, but enter into a plate lease arrangement with a taxi operator.

Taxi operators

There are around 4,500 taxi operators in NSW, which operate anywhere from one to more than 100 taxis each. All taxi operators must be accredited by the MoT after undergoing training. While some operators drive the taxis they operate, many bail out their taxis to bailee drivers.

In the Sydney metropolitan area, bailee drivers pay a bailment fee to the operator for use of the taxi. The Industrial Relations Commission sets a maximum amount for this fee per shift. bailee drivers also have to pay for the costs of fuel used during their shift, and of cleaning the taxi after their shift. In return, they get to keep the remaining revenue they earn during that shift. The taxi operator is responsible for meeting all other costs of running the taxi (ie, all except for fuel and cleaning costs).

In country NSW, taxis operate on a 50-50 split system where the operator and driver each retain 50 per cent of the takings. Under this arrangement, the taxi operator pays for all the costs of running the taxi, including fuel and cleaning costs.

Taxi networks

Under MoT regulations, all taxi operators must be affiliated with a MoT authorised taxi network. The networks provide a radio booking service and a GPS tracking and alarm monitoring service, and a lost property service. There are currently 11 taxi networks in Sydney.

Taxi drivers

There are 22,000 drivers authorised by the MoT in NSW of which between 12,000 and 15,000 are actively driving taxis. Some drivers drive a taxi they either own and/or operate while others serve as bailee drivers. In obtaining MoT authorisation, drivers must complete compulsory training courses, and pass English proficiency and Sydney locality tests.

[2] Section 29A

Table 2.1 Fare components and average fares in urban areas, 2001 to 2005

	From 1 September 2001	From 22 July 2002	From 7 September 2003	From 1 November 2004	From 10 July 2005
Flagfall	$2.45	$2.55	$2.65	$2.75	$2.80
Distance (per km)	$1.38	$1.45	$1.53	$1.56	$1.62
Waiting time (per hour)	$37.10	$37.35	$40.00	$40.91	$40.91
Radio booking fee	$1.15	$1.25	$1.10	$1.45	$1.40
Average fare components:					
Kilometres travelled	10 km	10 km	7 km	7 km	7 km
Minutes of waiting time	3 mins	3 mins	3 mins	3 mins	3 mins
Proportion of of radio booking fee	50%	50%	33.3%	20%	20%
Average fare	**$18.68**	**$19.54**	**$15.72**	**$16.01**	**$16.47**
Annual increase in average fare	**4.1%**	**4.6%**	**4.96%** (see note)	**2.34%** (see note)	**2.87%**

Notes:

- 'Radio booking fee' refers to the fee for booking a taxi over the phone.
- 'Waiting time' applies when vehicle speed is less than 25.25kph.
- The 'Average urban fare' is currently based on a 7 km trip, a radio booking every fifth trip and 3 minutes of waiting time. The assumption that an average trip is 7 km is based on information provided by the Transport Population and Data Centre of the NSW Department of Planning from the 2003 Household Travel Survey (which is the latest available). The other assumptions are based on information provided by industry stakeholders in past reviews.
- The assumptions used for kilometres travelled and the proportion of trips made with a radio booking were altered in 2003. Using the 2003 assumptions and the 2002 fares, the average fare in 2002 would have been $14.98.
- In 2003, the Tribunal recommended that the radio booking fee should be $1.00. The average fare would then have been $15.69, an increase of 4.73 per cent on the previous year's average fare.
- The assumption used for the the proportion of trips made with a radio booking was changed again in 2004. Using the 2004 assumptions and the 2003 fares, and using the radio booking fee of $1.40 determined by the Director General (see text below), the average fare in 2003 would have been $15.64.

Table 2.2 Fare components and average fares in country areas, 2001 to 2005

	From 1 September 2001	From 22 July 2002	From 7 September 2003	From 1 November 2004	From 10 July 2005
Flagfall	$2.95	$3.05	$3.15	$3.20	$3.30
Distance (per km)	$1.44	$1.51	$1.59	$1.61	$1.69
Waiting time (per hour)	$37.10	$37.35	$40.00	$40.91	$40.91
Radio booking fee	$0.65	$0.75	$0.80	$0.85	$0.90
Average fare components:					
Kilometres travelled	3 km	3 km	3 km	3 km	3 km
Minutes of waiting time	3 mins	3 mins	3 mins	3 mins	3 mins
Proportion of of radio booking fee	50%	50%	50%	50%	50%
Average fare	**$9.45**	**$9.82**	**$10.32**	**$10.50**	**$10.87**
Annual increase in average fare	**4.2%**	**4.0%**	**5.06%**	**1.75%**	**3.48%**

Notes:

- 'Waiting time' applies while vehicle speed is less than 24.21kph.
- Average country fare is based on a 3 km trip, a radio booking every second trip, 3 minutes waiting time. These assumptions are based on information provided by industry stakeholders in past reviews.

In addition to the fare components shown in Tables 2.1 and 2.2, there are a number of other regulated charges that relate to taxi services, including:

- the night-time surcharge, which is currently 20 per cent on top of the distance rate between 10pm and 6am
- luggage rates, which are currently 10 cents for each 25kg after an initial 25kg, up to a maximum of 55 cents
- maxi cab hiring rates
- the holiday surcharge, which is currently 20 per cent on top of the distance rate on Sundays and Public Holidays in country areas only.

Please note that the Tribunal will not be considering increases to these other regulated charges as part of this review, because no stakeholders proposed an increase to these charges in their submissions.

It is also important to note that the fares schedules shown in Tables 2.1 and 2.2 are those determined by the Director General of the Ministry of Transport, as provided for in section 60A of the *Passenger Transport Act 1990*. These fares are not necessarily the same as the maximum fare schedules recommended by the Tribunal, whose role is only to investigate and report on fares. For example, in recent years, the Director General's determinations have departed from the Tribunal's recommendations on several occasions:

- In 2001, the Tribunal recommended that the distance rate should be set at $1.36 for urban areas and $1.38 for country areas, and that the radio booking fee should be set at $1.55 for urban areas and $1.00 for country areas. The Director General determined distance rates of $1.38 and $1.44 for urban and country areas respectively, and radio booking fees of $1.15 and $0.65 for urban and country areas respectively. However, in both cases, Director General's determination resulted in the same overall increase in the average fare as would have occurred under the Tribunal's recommendation.
- In 2003, the Tribunal recommended that fares rise by 4.73 per cent in urban areas. However, the Director General decided to increase the radio booking fee by 10 cents more than recommended by the Tribunal, resulting in a 5.00 per cent increase in the average fare.
- In April 2004, the Director General increased the radio booking fee by 30 cents to coincide with the commencement of a no destinations trial, and reduced this fee by 30 cents at the completion of this trial in November 2004. Neither of these changes were the subject of a review or recommendation by the Tribunal.

2.3 The Tribunal's approach for adjusting fares to date

Since it began reviewing taxi fares in 2001, the Tribunal has based its recommendations for fare changes on a modified version of a Taxi Cost Index that was developed by PricewaterhouseCoopers for the MoT and the NSW Taxi Council in 1999. The Tribunal modified this index by including allowances for bailee driver labour and taxi plate values.

As part of the Tribunal's annual review process, the NSW Taxi Council has made a submission to the Tribunal that provided its values for the inputs to the Taxi Cost Index, and proposed changes to the fare components in line with any increase in the index. The Tribunal has also sought submissions from other industry stakeholders, including the Transport Worker's Union, the Taxi Drivers' Association, taxi user groups and members of the public.

In assessing the information related to changes in the values of inputs to the Taxi Cost Index, the Tribunal has investigated and assessed whether the change in the cost of each item was based on information that was:

- *consistent* with the description of the item in the relevant cost index in previous years
- *representative* of the class of costs for which the items were selected, and
- *verifiable* as to the size of the change.

However, the Tribunal is concerned about several aspects of this approach, including its reliance on information provided by stakeholders, and the length of time required to assess changes in inputs to the index. In its previous reports to the Minister, the Tribunal has identified several weaknesses in the Taxi Cost Index approach, and suggested alternative approaches including CPI-X and building block approaches.

Stakeholders are also critical of the current approach. For example, in its submission to this review, the Transport Workers Union (TWU) reasserted its view of:

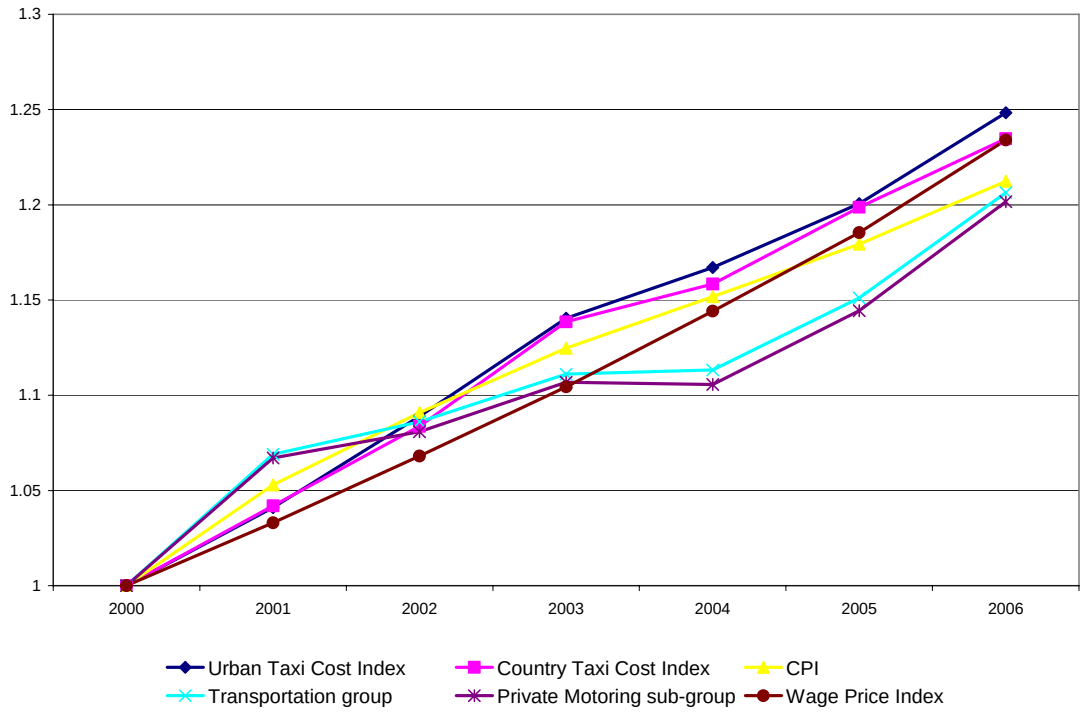
> …the flawed nature upon which IPART considers its review. The TWU and its members in previous submissions have highlighted the flawed nature of this review and argued for substantial overhaul in IPART's analysis prior to any recommendation to government.[3]

Given its own and other stakeholders' concerns, the Tribunal has decided to examine the alternative approaches for recommending changes to maximum taxi fares as part of its 2006 review.

The following chapter describes five alternatives (including the current industry-specific index approach).

The Tribunal has calculated the cumulative changes in taxi fares that would have occurred (excluding adjustments for improvements in productivity) if each of the alternative approaches had been used in past reviews. This analysis indicates that the differences between fare changes under each of the approaches are not significant (Figure 2.1).

Figure 2.1 Cumulative changes in taxi fares that would have occurred under alternative approaches



3 Transport Worker's Union submission to the 2006 Review of Taxi Fares, p 3.

By 2006, the following increases, excluding productivity, would have occurred:

Table 2.3 Cumulative change in taxi fares that would have occurred under each alternative approach

Approach	Cumulative increase to 2006
Tribunal's modified Urban Taxi Cost Index	24.8 %
Tribunal's modified Country Taxi Cost Index	23.5 %
CPI	21.4 %
CPI – transportation group	20.6 %
CPI – private motoring sub-group	20.1 %
Wage Price Index	23.5 %
Composite increase – CPI/WPI	22.6 %
Composite increase – transportation/WPI	22.3 %
Composite increase - private motoring/WPI	22.0 %

However, the information and time requirements for the different approaches – both for industry participants and for the Tribunal – would have varied considerably.

3 THE ALTERNATIVE APPROACHES FOR ADJUSTING FOR INCREASES IN TAXI COSTS

As Chapter 2 discussed, the Tribunal has several concerns about using the Taxi Cost Index as the basis for assessing changes in the costs of providing taxi services and recommending changes to the fare schedule. For this reason, it has decided to identify and assess the range of alternative approaches, and determine the most appropriate approach.

The Tribunal has identified five possible approaches that could be used to adjust taxi fares for increases in costs, including using:

- an industry-specific cost index, such as the current Taxi Cost Index
- the Consumer Price Index (CPI)
- the transportation or private motoring components of the CPI
- a wage price index
- a composite increase of Australian Bureau of Statistics (ABS) inflators, such as the CPI and wage price index.

Each of these alternatives, including its advantages and disadvantages, is described below.

3.1 Industry-specific cost index

The Tribunal could continue to use the Taxi Cost Indices that it has used for past reviews, or develop an alternative industry-specific cost index. The following sections discuss the NSW Taxi Council's proposed changes to the current cost indices for 2006, the Tribunal's amendments to these proposed indices, and the advantages and disadvantages of continuing to use an industry-specific cost index approach.

3.1.1 NSW Taxi Council's proposed changes to the Taxi Cost Indices for 2006

The NSW Taxi Council's proposed changes to the Taxi Cost Indices for urban and country areas, provided as part of its 2006 submission to the Tribunal, are shown in Tables 3.1 and 3.2. The NSW Taxi Council has requested increases of 5.07 per cent in urban fares and 3.76 per cent in country fares, in line with its proposed changes to these indices.

Table 3.1 NSW Taxi Council – Proposed changes in the Taxi Cost Index for urban areas, 2005 to 2006

Urban Operator Expenses	Measured at 31 March 2005	Index Change	Measured at 31 March 2006	Contribution to total fare change
Fixed Costs				
Vehicle Lease payments	$9,926	-4.31%	$9,498	-0.21%
Insurance	$14,329	0.47%	$14,396	0.03%
Govt Charges	$797	1.76%	$811	0.01%
Network Fees	$6,848	0.06%	$6,852	0.00%
Plate Lease cost	$20,806	4.40%	$21,722	0.62%
Annualised Establishment Costs	$1,505	10.40%	$1,661	0.06%
Variable Costs				
Maintenance Labour	$8,842	3.64%	$9,163	0.15%
Vehicle Parts & Panels	$11,402	2.38%	$11,673	0.12%
Cleaning	$480	0.00%	$480	0.00%
Tyres	$3,399	15.33%	$3,920	0.25%
Operator Salary Equivalent	$13,919	3.57%	$14,415	0.26%
Driver entitlements	$4,164	2.95%	$4,287	0.06%
Uniforms	$2,406	-0.91%	$2,384	-0.01%
Other	$3,755	2.29%	$3,841	0.05%
Driver Expenses				
LPG Fuel	$15,290	28.11%	$19,587	2.35%
Notional Driver's Wages	$69,048	3.57%	$71,511	1.29%
Cleaning	$3,082	2.29%	$3,153	0.04%
Total	$190,000		$199,355	**5.07%**
Operator Component	$102,580		$105,105	1.39%
Driver Component	$87,420		$94,251	3.68%
Total	$190,000		$199,355	**5.07%**

Table 3.2 NSW Taxi Council - Proposed changes in the Taxi Cost Index for country areas, 2005 to 2006

Country Operator Expenses	Measured at 31 March 2005	Index Change	Measured at 31 March 2006	Contribution to total fare change
Fixed Costs				
Vehicle Lease payments	$9,936	-9.76%	$8,966	-0.57%
Insurance	$8,229	5.09%	$8,648	0.25%
Govt Charges	$797	1.76%	$811	0.01%
Network Fees	$10,794	-3.96%	$10,366	-0.28%
Plate Lease cost	$11,284	4.40%	$11,780	0.45%
Annualised Establishment Costs	$753	10.40%	$831	0.05%
Variable Costs				
Maintenance Labour	$7,497	4.41%	$7,828	0.18%
Vehicle Parts & Panels	$5,930	2.38%	$6,071	0.07%
Cleaning	$2,416	2.29%	$2,471	0.05%
Tyres	$2,428	15.33%	$2,800	0.23%
Operator Salary Equivalent	$13,919	3.57%	$14,415	0.34%
Uniforms	$2,406	-0.91%	$2,384	-0.02%
Other	$3,466	2.29%	$3,545	0.06%
LPG Fuel	$12,868	17.79%	$15,157	1.62%
Driver Expenses				
Notional Driver's Wages	$54,404	3.57%	$56,344	1.32%
Total	$147,127		$152,420	**3.76%**
Operator Component	$92,723		$96,076	2.44%
Driver Component	$54,404		$56,344	1.32%
Total	$147,127		$152,420	**3.76%**

3.1.2 Tribunal's amendments to the proposed changes in the Taxi Cost Indices for 2006

As it has done in previous years, the Tribunal has amended the NSW Taxi Council's proposed changes to the inputs to the Taxi Cost Indices for urban and country areas, to ensure they reflect the latest available data, and to adjust the value of several items based on its own assessment of the changes to costs over the past year.

In particular, the Tribunal has amended the urban index by:

- Adjusting the LPG Fuel cost item, so the value of this item is calculated using the same methodology as in previous years. (That is, by using the average over April 2005 to March 2006 compared to the average over April 2004 to March 2005, rather than the price in February 2006 compared to the price in February 2005 as submitted by the Taxi Council.) The Tribunal believes this methodology gives a better indication of the trend in LPG prices than comparing the prices at two individual points in time.
- Updating the value of the network fees item, to include data for Wollongong and Manly networks that the NSW Taxi Council provided after it had made its submission.
- Updating the value of all items that had been adjusted in line with changes in the CPI and its components or with the Labour Price Index, to reflect the latest data available from the Australian Bureau of Statistics (that is, the March quarter 2006 data, which became available after the NSW Taxi Council had made its submission).
- Updating the plate lease cost item, to include transfer values to the end of March 2006 provided by the MoT.

With the exception of the changes to the network fees cost item, the Tribunal made the same amendments to the Taxi Price Index for country areas. As result of these amendments, the Tribunal's amended Taxi Cost Index for urban areas indicates a total cost increase of 3.98 per cent (Table 3.3). The Tribunal's amended Taxi Cost Index for country areas indicates a total cost increase of 3.00 per cent (Table 3.4).

Table 3.3 Tribunal's amended Taxi Cost Index for urban areas, 2006

Urban Operator Expenses	Measured at 31 March 2005	Index Change	Measured at 31 March 2006	Contribution to total fare change
Fixed Costs				
Vehicle Lease payments	$9,926	-4.31%	$9,498	-0.21%
Insurance	$14,329	0.47%	$14,396	0.03%
Govt Charges	$797	1.76%	$811	0.01%
Network Fees	$6,848	0.02%	$6,849	0.00%
Plate Lease cost	$20,806	4.17%	$21,674	0.59%
Annualised Establishment Costs	$1,505	10.40%	$1,661	0.06%
Variable Costs				
Maintenance Labour	$8,842	3.63%	$9,163	0.15%
Vehicle Parts & Panels	$11,402	2.69%	$11,709	0.14%
Cleaning	$480	0.00%	$480	0.00%
Tyres	$3,399	15.33%	$3,920	0.25%
Operator Salary Equivalent	$13,919	4.09%	$14,488	0.30%
Driver entitlements	$4,164	2.95%	$4,287	0.06%
Uniforms	$2,406	-1.55%	$2,369	-0.02%
Other	$3,755	2.64%	$3,854	0.05%
Driver Expenses				
LPG Fuel	$15,290	12.50%	$17,201	1.04%
Notional Driver's Wages	$69,048	4.09%	$71,870	1.48%
Cleaning	$3,082	2.64%	$3,163	0.05%
Total	$190,000		$197,394	**3.98%**
Operator Component	$102,580		$105,159	1.41%
Driver Component	$87,420		$92,235	2.57%
Total	$190,000		$197,394	3.98%

Table 3.4 Tribunal's amended Taxi Cost Index for country areas, 2006

Country Operator Expenses	2005	Index Change	2006	Contribution to total fare change
Fixed Costs				
Vehicle Lease payments	$9,936	-9.76%	$8,966	-0.57%
Insurance	$8,229	5.09%	$8,648	0.25%
Govt Charges	$797	1.76%	$811	0.01%
Network Fees	$10,794	-3.96%	$10,366	-0.28%
Plate Lease cost	$11,284	4.17%	$11,755	0.42%
Annualised Establishment Costs	$753	10.40%	$831	0.05%
Variable Costs				
Maintenance Labour	$7,497	4.41%	$7,828	0.18%
Vehicle Parts & Panels	$5,930	2.69%	$6,089	0.08%
Cleaning	$2,416	2.64%	$2,480	0.06%
Tyres	$2,428	15.33%	$2,800	0.23%
Operator Salary Equivalent	$13,919	4.09%	$14,488	0.39%
Uniforms	$2,406	-1.55%	$2,369	-0.03%
Other	$3,466	2.64%	$3,557	0.06%
LPG Fuel	$12,868	6.91%	$13,758	0.63%
Driver Expenses				
Notional Driver's Wages	$54,404	4.09%	$56,628	1.51%
Total	$147,127		$151,374	**3.00%**
Operator Component	$92,723		$94,746	1.49%
Driver Component	$54,404		$56,628	1.51%
Total	$147,127		$151,374	3.00%

Attachment 3 explains in more detail how the Tribunal has calculated the increase in individual cost items and, where possible, how it has calculated the actual cost of an item.

3.1.3 Movement in the Taxi Cost Indices over the past six years

Since 2000, the Taxi Cost Index for urban areas that the Tribunal has used as the basis of its recommendations has increased by 24.8 per cent, while the index for country areas has increased by 23.5 per cent (Table 3.5).

Table 3.5 Movement in Tribunal amended Taxi Cost Indices since 2000

Year to 31 March	Urban %	Country %
2006	3.98	3.00
2005	2.87	3.48
2004	2.34	1.75
2003	4.73	5.06
2002	4.6	4.0
2001	4.1	4.2

3.1.4 Advantages and disadvantages of using an industry-specific cost index approach

The Tribunal has identified several advantages of continuing to use an industry-specific cost index approach. These include that:

- This approach has been used for the past five taxi fare reviews conducted by the Tribunal (and for earlier reviews conducted by MoT), and therefore is well understood by stakeholders. Continuing to use this approach would avoid the need for stakeholders to come to grips with a new approach.
- The existing Taxi Cost Index provides a breakdown of cost increases incurred by operators versus drivers, and thus assists the Industrial Relations Commission in determining maximum bailee payments.
- As an industry-specific cost index, it captures movements in the cost of items peculiar to the taxi industry, such as network fees and plate lease fees.

The Tribunal has also identified a range of disadvantages associated with continuing to use the current Taxi Cost Indices or another industry-specific cost index. These include that:

- The use of an industry-specific cost index is time-consuming and costly for stakeholders, as it requires them to provide a significant amount of information to calculate the movement in the index on an annual basis.
- It is unclear how accurately the current indices reflect the industry's cost structure, as a 'benchmark taxi' has not been identified. While most operators operate only a single taxi, a significant number operate larger fleets of taxis. The index does not take into account possible economies of scale resulting from these different business structures.
- Several of the cost items included in the current indices appear to be over-represented in the index weightings, including uniforms and vehicle maintenance costs. The Tribunal recognises that this concern could be overcome by regular, thorough surveys of the index, but it considers that this would be costly and intrusive on taxi industry stakeholders.
- The value of many of the cost items within the current indices has not been calculated on an arm's length basis. In particular, the Tribunal notes that the NSW Taxi Council provides data on changes in the value of the components of the indices, but that entities associated with the NSW Taxi Council provide many of the services associated with these components, including radio booking/network services, insurance brokers,

smash repair services, finance for taxi vehicles, and leasing services for taxi plates. Thus the approach relies heavily on data about changes in costs provided from a few stakeholders who, it could be argued, have an interest in inflating these costs. The Transport Workers' Union also raised this concern in its submission, stating that:

> It is the Union's respectful submission that the role of partisan bodies such as the Taxi Council and the TWU is to provide advice and counsel on matters of their interest. Neither organisations' submissions should be used by the Tribunal as 'the best available evidence' to solely base its recommendations from.[4]

- The current cost indices do not adequately take into account appropriate rewards for risks taken in the industry. While the indices include as a cost item driver and operator 'salary equivalent', it does not take into account the revenues earned and therefore does not explicitly differentiate the profit component and the labour component of costs.
- The industry-specific cost index approach does not take into account productivity gains within the taxi industry.

The Tribunal welcomes comments on:

* ***The advantages and disadvantages of the use of continuing to use an industry-specific taxi cost index, including those identified by the Tribunal and others identified by stakeholders.***

If it appears that the best result will be achieved by continuing to use an industry-specific taxi cost index to calculate changes in the costs of providing taxi services, the Tribunal also welcomes comments on:

* ***How to define a benchmark taxi?***

* ***How to measure the costs for that benchmark taxi, including how to account for economies of scale?***

* ***How frequently the amount of each component should be assessed, in order to ensure the correct weightings are used?***

* ***What should be the adjustment to the Taxi Cost Index for productivity gains?***

3.2 Consumer Price Index

One of the alternatives to using an industry-specific cost index is to adjust taxi fares each year in line with the movement in the Consumer Price Index (CPI). The movement in the CPI provides an indication of the increase in prices in the economy as a whole. Specifically, it measures the rise in the prices of a basket of goods typically purchased by households, including food, alcohol and tobacco, clothing and footwear, housing, furniture and household goods, health services, transportation, communication, recreation, education and financial and insurance services.

4 TWU submission to the 2006 Review of Taxi Fares, p 4.

3.2.1 Movements in the CPI over the past six years

Since 2000, the CPI has risen by a total of 21.4 per cent (Table 3.6).

Table 3.6 Movement in the CPI[5] since 2000

Year to 31 March	%
2006	2.8
2005	2.4
2004	2.4
2003	3.1
2002	3.6
2001	5.3

3.2.2 Advantages and disadvantages of adjusting taxi fares by the CPI

The Tribunal has identified two advantages of changing taxi fares in line with the change in the CPI. The first is that the CPI is independently calculated and published, and is widely available on a timely basis. As a consequence, the use of this index would be straightforward, and regulatory costs and information requirements would be minimal. In addition, the process for calculating fare changes would be transparent and simple. The second advantage is that the CPI takes economy-wide productivity gains into account.

However, the Tribunal has also identified several disadvantages of using this approach, including that:

- The components of the CPI do not closely mirror the cost structure of the taxi industry. The CPI is based on a basket of goods purchased by households and thus cannot capture the movement in cost items not purchased by households, such as network fees.
- The CPI does not directly include changes in the cost of labour, which comprises a significant portion of costs in the taxi industry.
- The CPI does not take account of industry-specific productivity gains.

The Tribunal welcomes comments on:

* ***The advantages and disadvantages of using the movement in the CPI to adjust taxi fares each year, including those identified by the Tribunal and others identified by stakeholders.***
* ***What should be the adjustment to the CPI for industry specific productivity gains?***

5 Measured using the average of four quarters on four quarters for years ending in March, for the eight capital cities.

3.3 The transportation and private motoring components of the CPI

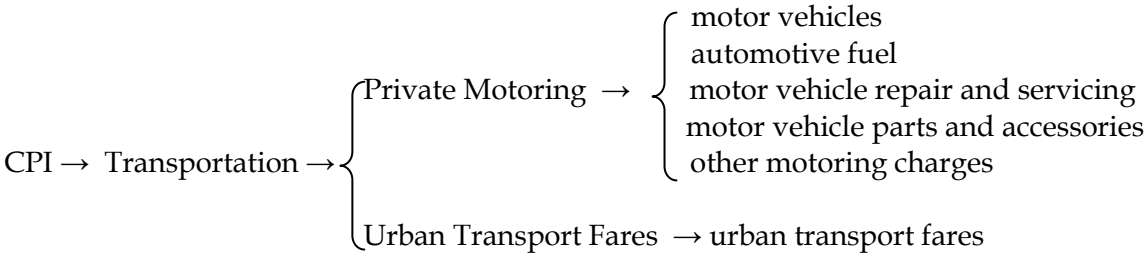
A third alternative would be to adjust taxi fares each year in line with the either the movement in the transportation group of the CPI, or the private motoring sub-group of this transportation group. The transportation group accounts for 13.1 per cent of the CPI. The private motoring sub-group comprises 94.4 per cent of the transportation group.

The private motoring sub-group includes the following components:

- Motor vehicles (39.6 per cent). This component includes the movement in the price of new vehicles purchased by households and a small number of used vehicles purchased by households from businesses/government in addition to vehicle hire.
- Automotive fuel (30.5 per cent). This component includes the movement in the price of fuels – predominantly unleaded petrol but also diesel and LPG, to the degree that they are purchased by households.
- Motor vehicle repair and servicing (16.1 per cent). This includes the movement in the price of the labour and parts involved in servicing a vehicle, including smash repairs.
- Motor vehicle parts and accessories (5.5 per cent). This refers to oil and lubricants, car batteries, tyres and any parts purchased outside of a service.
- Other motoring charges (8.2 per cent). This includes vehicle registration, drivers licence renewal, parking fees, driving lessons and tolls.

The remaining 5.6 per cent of the transportation group comprises urban transport fares, including the movement in urban train, bus, ferry, tram and taxi fares.

These elements of the CPI can be represented diagrammatically as follows:



The Tribunal notes that the Western Australian Government has made annual adjustments to taxi fares based on the movement in the private motoring sub-group of the CPI for Perth since 2004. It has stated that:

> …the Private Motoring sub-group takes account of specific costs associated with the taxi industry such as fuel, vehicle costs, insurance costs, and the cost of repairs and parts. For example, where there are significant increases in the cost of fuel then this will have a significant impact on the movement in the Private Motoring sub-group. This is because fuel is a substantial component of the Private Motoring sub-group. This is not the case in the CPI, in that a major increase in the fuel price

could occur but the CPI may in fact move relatively little, if at all, due to that increase. This is a significant advantage of the Private Motoring sub-group.[6].

3.3.1 Movements in the transportation and private motoring components of the CPI over the past six years

Since 2000, the transportation group has risen 20.6 per cent and the private motoring sub-group has risen 20.1 per cent (Table 3.7).

Table 3.7 Movement in the transportation group and private motoring sub-group of the CPI over the past six years[7]

Year to 31 March	Transportation group %	Private Motoring sub-group %
2006	4.8	5.0
2005	3.4	3.5
2004	0.2	-0.1
2003	2.3	2.4
2002	1.6	1.3
2001	6.8	6.7

3.3.2 Advantages and disadvantages of using the Transportation and Private Motoring components of the CPI

The Tribunal has identified three advantages of changing taxi fares in line with the change in the transportation group or the private motoring sub-group of the CPI, including that:

- Both the transportation group and private motoring sub-group of the CPI are independently calculated and published, and are widely available on a timely basis. As a consequence, the use of either of these indices would be straightforward, and the regulatory costs and information requirements would be minimal. In addition, the process for calculating fare changes would be transparent and simple.
- Both the transportation group and the private motoring sub-group of the CPI capture many of the items that make up the taxi industry's costs such as fuel, vehicles and repairs and servicing, so they better reflect the taxi industry's costs than the CPI.
- The fact that the transportation group includes urban transport fares may make it a closer fit to taxi costs to the extent that fares for other modes of transport are set to recover any cost increases incurred, assuming some cost elements are common across modes of public transport (for example, labour, fuel, and capital cost of vehicles).

6 *Report on the Review of the Operation and Regulatory Structure of the Taxi Industry in Regional Western Australia*, July 2004, p 29.

7 Measured using the average of four quarters on four quarters for years ending in March, for the eight capital cities.

The Tribunal has also identified a range of disadvantages, including that:

- The fact that the transportation group includes urban transport fares, including taxi fares, creates some degree of circularity.
- There is no direct allowance for the change in labour costs, which is the largest single cost driver in the taxi industry.
- Although many items included in both the transportation group and private motoring sub-group are common to the taxi industry, the nature and weighting of the items are different to those incurred by the taxi industry. For example:
  - The bulk of private motorists use unleaded petrol, while most taxis operate on LPG. Historical fuel price data collected by FuelTrac (see Attachment 2) suggest that trends in the prices of petrol and LPG do not always coincide, and at times their prices can move in opposite directions. FuelTrac's data indicates that for the first half of 2004 LPG prices steadily declined, while the price of unleaded petrol rose by nearly 10 cents per litre. During its 2004 review of taxi fares, the ACT regulator, the Independent Competition and Regulatory Commission (ICRC) also identified this as a disadvantage of using the movement in the private motoring sub-group as a basis for setting taxi fares setting. It stated that in measuring changes in the cost of fuel, this sub-group "captures mainly the change in costs of leaded and unleaded petrol rather than LPG, and the correlation between LPG and ULP prices is minimal. Fuel has a sizeable weighting within the Private Motoring sub-group, making this index more variable".[8]
  - The motor vehicles included in the private motoring sub-group are predominantly new vehicles, while a significant proportion of taxis are purchased as second-hand vehicles.
  - Whereas householders usually purchase new vehicles, taxis are typically leased. This means that the private motoring sub-group so does not reflect changes in interest paid on leases.
  - Even when the expenses are common to taxis and private vehicles, the weightings of the transportation group and private motoring sub-group do not reflect the weightings that would apply to the taxi industry. For example, a green slip for a taxi costs approximately 10 times more than a green slip for a private motor vehicle.
  - There are a large number of costs faced by the taxi industry that are not captured in the transportation group or private motoring sub-group, including taxi plate lease fees, network fees, uniform costs and comprehensive car insurance.
  - Taxis travel far greater distances than most private vehicles, so that variable costs such as fuel and tyres would be understated in the private motoring sub-group.
- Both the transportation group and private motoring sub-group fluctuate from year to year, so its use for adjusting taxi fares would result in less certain outcomes than other approaches.

8 ICRC Draft Determination 2004, p 47.

The Tribunal welcomes comments on:

* *The advantages and disadvantages of adjusting taxi fares in line with the movement in the transportation group or the private motoring sub-group of the CPI, including those identified by the Tribunal and others identified by stakeholders.*
* *What should be the adjustment to the transportation or private motoring components of the CPI for taxi industry productivity gains?*

3.4 Wage Price Index

Labour is a significant input to the taxi industry, and labour-related costs comprise a varying proportion of total taxi costs, depending on whether it is an operator-driver or bailee-driver operation, and the scale of the business (single taxi or multi taxi fleet).

Two ABS measures of changes in labour costs are available. The first is the Wage Price Index (WPI), which is designed to measure the change over time in the price of labour. The second is Average Weekly Earnings (AWE), which is an estimate of average weekly ordinary time earnings and average weekly total earnings for full-time adult employees.

The ABS advocates the use of the WPI as the best measure of wage cost movements. It does not recommend using the change in Average Weekly Earnings is for this purpose as it is affected by changes in hours worked and the composition of the workforce. In particular, the ABS states that:

> Period-to-period movements for the Average Weekly Earnings (AWE) series are not comparable with those for the Wage Price Index (WPI) (previously known as the Wage Cost Index). It is important to recognise that the two series have different purposes and concepts and use different sample selection and estimation methodologies.
>
> The AWE survey is designed to measure the level of average earnings in Australia at a point in time. It does this by collecting information from businesses on their number of employees and their total gross weekly earnings for a specific pay period each quarter. The WPI is a price index designed to measure the change over time in the price of labour. It does this by pricing specific jobs, in terms of wage and salary payments to employees occupying the jobs, and collecting information from businesses each quarter on price changes in those jobs. It is unaffected by changes in the quality and quantity of labour purchased by employers.
>
> In addition to changes in the price of labour, AWE estimates are affected by changes in hours worked and by compositional changes in the employee workforce. The WPI prices a fixed quantum of labour services for each job, and hence changes to base earnings resulting from increases in hours worked or from changes in the composition of the employee workforce will not be reflected in the index. [9]

Thus the WPI is an input price index that measures changes over time in the prices paid by businesses for a fixed quantity and quality of labour input. It does not take the output of this labour into account, and therefore does not make allowances for changes in the level of productivity.

Given the importance of labour as a cost driver in the taxi industry, the Tribunal sees merit in considering using changes in the WPI to adjust taxi fares.

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9 Australian Bureau of Statistics, Cat. No. 6302.0, Average Weekly Earnings, Australia.

3.4.1 Movement in the Wage Price Index over the past six years

Since 2000 the WPI has risen by a total 23.5 per cent (Table 3.8).

Table 3.8 The movement in the WPI since 2000

Year to 31 March	WPI %
2006	4.1
2005	3.6
2004	3.6
2003	3.4
2002	3.4
2001	3.3

3.4.2 Advantages and disadvantages of using the Wage Price Index

The Tribunal has identified a range of advantages and disadvantages of using the movement in the WPI as the basis for adjusting taxi fares. The advantages include that:

- The WPI is independently calculated and published, and is widely available on a timely basis. As a consequence, its use would be straightforward, and regulatory costs and information requirements would be minimal. In addition, the process for calculating fare changes would be transparent and simple.
- The WPI recognises that labour is a key cost driver in the taxi industry.

The disadvantages are that the WPI focuses on only one input to the taxi industry, and does not make any allowance for productivity gains.

The Tribunal welcomes comments on:

* ***The advantages and disadvantages o fusing the movement in the WPI to adjust taxi fares, including those identified by the Tribunal and others identified by stakeholders.***
* ***What should be the adjustment to the WPI for productivity gains?***

3.5 Composite increase of ABS inflators

The final option the Tribunal has identified is to use a composite increase made up of ABS inflators, such as a weighted increase based on the CPI (or one of its groups/sub-groups) and the WPI. Given the lack of concrete evidence about the composition of costs in the taxi industry, one approach would be to give equal weighting to the CPI and the WPI. The composite increase would be:

$$FareRise = \left[\left(1 + \left(0.5 \times CPI\right)\right) \times \left(1 + \left(0.5 \times WPI\right)\right)\right] - 1$$

Alternatively, the transportation group or private motoring sub-group of the CPI could be substituted for the CPI.

The ICRC also considered using a composite increase during its 2004 review of ACT taxi fares. It stated that:

> Over the medium to long term, a well-designed composite index can broadly track the results of indices such as the WCI [Weighted Cost Index, a cost index used by ICRC in determining taxi fares], but with less subjectivity and lower resource requirements for calculation. In addition, a productivity gain (or X-factor) could be inserted into the index to provide incentives to improve efficiency.[10]

3.5.1 Movements over the past six years

Since 2000, an index based on 50 per cent CPI and 50 per cent WPI has increased by 22.6 per cent. An index based on 50 per cent transportation group of the CPI and 50 per cent WPI has increased by 22.3 per cent. An index based on 50 percent private motoring sub-group of the CPI and 50 per cent WPI has risen by 22.0 per cent (Table 3.9).

Table 3.9 Movement in composite indices since 2000

Year to 31 March	CPI/WPI %	Transportation group/WPI %	Private motoring sub-group/WPI %
2006	3.5	4.5	4.6
2005	3.1	3.6	3.6
2004	3.0	1.9	1.8
2003	3.3	2.9	2.9
2002	3.6	2.5	2.4
2001	4.3	5.1	5.0

3.5.2 Advantages and disadvantages of composite change

The Tribunal has identified four advantages of using a composite index as the basis for adjusting taxi fares, including that:

- The proposed indices are independently calculated and published, and are widely available on a timely basis. As a consequence, their use would be straightforward, and regulatory costs and information requirements would be minimal. The process for calculating fare changes would be transparent and simple.
- The use of a composite index would better reflect taxi industry costs than the use of either the CPI or WPI alone.
- A composite index would take account of economy-wide productivity in the CPI component, but would still allow for incremental taxi industry productivity to be allowed for separately.

The Tribunal has identified one disadvantage of this approach – that is that it does not make specific allowances for costs unique to the taxi industry.

10 ICRC Draft Determination 2004, p 48.

The Tribunal welcomes comments on:

* *The advantages and disadvantages of the use of the movement in a composite index in setting taxi fares, including those identified by the Tribunal and others identified by stakeholders.*
* *Which of the three options for the CPI component of a composite index would be most appropriate (ie, the CPI, transportation group or the private motoring sub-group)?*
* *What weighting should be given to the labour component and the CPI-based component?*
* *What should be the adjustment to a composite index for productivity gains?*

4 THE NEED TO TAKE PRODUCTIVITY GAINS INTO ACCOUNT

The Tribunal's terms of reference for this review require it to consider "the cost of providing the services concerned." This phrase has often been interpreted as referring to the costs per unit of *input*. However, the Tribunal considers it reasonable for it to also consider changes in output per hour worked – that is, to consider the potential for productivity growth.

Indeed, the Tribunal considers that one of the major weaknesses of relying on the Taxi Cost Index as a guide to changes in costs per unit of input is that it makes no allowance for the ongoing rises in productivity (output per hour worked) that characterise the Australian economy. The Tribunal believes productivity will continue to rise in the future, both for the economy as a whole and the taxi industry. It notes that the Victorian regulator, the Essential Services Commission (ESC), shares this view. In its 2005 review of taxi fares, the ESC commented that:

> A labour intensive activity such as taxi services, which competes with other modes of passenger transport, would be expected to generate total factor productivity improvements to remain competitive.[11]

One potential source of productivity gains is greater fleet utilisation. For example, the ESC has observed in Victoria that taxi "vehicles are being operated more intensively which means fixed costs are spread over a greater number of paid kilometres".[12] In its submission to the Tribunal's 2006 review, the NSW Taxi Council noted that "productivity gains have been made by taxi networks in the most recent year"[13] and cited several examples that demonstrate the industry's efforts to increase efficiency. These examples include:

- The reduction in country network fees due to the establishment of a joint communications centre to provide booking and despatch services for networks in Dubbo, Orange and Bathurst.
- The trial of a hybrid-engine vehicle (Toyota Prius) that has been operating as a Sydney taxi for 11 weeks.
- The establishment, in conjunction with Willoughby Council, of a pre-booked shared ride service to increase fleet utilisation during off-peak periods.

The Tribunal believes the average increase in input costs needs to be adjusted to take into account the scope for productivity gains within the industry, through the use of an X-factor. It believes that this will provide an appropriate incentive for participants in the taxi industry to pursue productivity gains. As noted in Chapter 3, indices such as the CPI already take account of productivity gains in the economy as a whole. However, it is necessary to take account the productivity gains made by the taxi industry, in addition to these economy-wide gains.

The following sections outline several possible approaches for determining an X-factor to take account of these productivity gains in setting taxi fares, the approaches taken in other jurisdictions, and the advantages and disadvantages of adopting a productivity adjustment.

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11 ESC Final Report, *Taxi Fare Review 2005*, p 4.
12 ESC Final Report, *Taxi Fare Review 2005*, p 41.
13 NSW Taxi Council submission, March 2006, p 5.

4.1 Possible approaches for determining a X-factor to account for productivity gains

The Tribunal has identified three possible approaches that could be used to determine an X-factor to account for productivity gains within the taxi industry when setting taxi fares. These approaches include:

- Using transport industry data available from the ABS.
- Using economy-wide data available from the ABS.
- Making a conservative estimate.

Each of these options is outlined below.

4.1.1 Using transport industry data from the ABS

The ABS collects and publishes industry-sector data on gross value added at constant prices, and on the number of employees. However, it does not collect data specifically on the passenger transport industry. The industry sector most relevant to the taxi industry is Transport and Storage. This sector includes business units that are engaged in providing:

- passenger or freight transport by road, rail, water or air
- terminal facilities for passengers or freight
- services related to transport such as car parking, stevedoring, harbour services, navigation services, airport operation or space port operation
- booking, travel, freight forwarding, crating or customs agency services
- storage facilities.

It also includes business units that are mainly engaged in operating pipelines for the transportation of oil, gas, etc., on a contract or fee basis.

The Transport and Storage sector data indicates that in 2004/05, gross value added per employee (a proxy for labour productivity) increased by 1.2 per cent in the sector.[14] Over the past six years, this measure increased by an annual average of 4.0 per cent (largely due to 8 per cent increases in each of 2001/02 and 2002/03). Over the past two decades, it increased by an annual average of 3.5 per cent, compared to an annual average of 1.4 per cent in the economy as a whole.

Much of this productivity growth is likely to have come from the microeconomic reforms that have driven productivity gains in freight handling at ports and airports, and on roads and railways. (For example, the number of containers unloaded per hour at main eastern seaboard ports has more than doubled since 1998.) However, these gains are of no obvious relevance to productivity in the passenger transport industry.

[14] ABS, *Australian National Accounts National Income, Expenditure and Product, December 2005;* ABS Labour Force, Australia, December 2005.

4.1.2 Using economy-wide data from the ABS

The ABS also collects and publishes data on economy-wide labour productivity. One measure of this productivity is the rise in the volume of gross value added relative to total hours worked. (This is the widely accepted definition of labour productivity at the national level.) Using this measure, labour productivity has increased at an average annual rate of 1.48 per cent over the past six years.[15]

Another broad measure of labour productivity is the trend GDP per hour worked. Using this measure, over the last five years labour productivity within the market sector of the economy increased by an annual average of 2.0 per cent. Over the past two decades, labour productivity in the whole economy grew by an annual average of 1.6 per cent, and in the market sector, by an annual average of 2.1 per cent.

4.1.3 Making a conservative estimate

Since there is no direct measure for productivity gains in the NSW taxi industry, and given the uncertainty about how the above measures could be applied to the taxi industry, a more conservative approach would be to estimate the potential for the taxi industry to achieve productivity gains above the economy-wide gains. The Tribunal considers that an estimate in the order of 1 per cent would be appropriate, which would mean adopting an X-factor of 1 per cent.

This approach and X-factor would be consistent with the Tribunal's recommendation for private buses last year,[16] and with the approach and X-factor adopted by the Victorian regulator in its 2005 review of taxi fares (see below).

4.2 Productivity considerations in other jurisdictions

In recent years, regulators in Victoria and the ACT have considered approaches for accounting for productivity gains when setting taxi fares. Their preferred approaches are outlined below.

4.2.1 Victoria

In 2005, the Victorian Essential Services Commission (ESC) recommended adopting a CPI-X approach for setting of taxi fares. As part of its review process, the ESC engaged Pricewaterhouse Coopers (PwC) to investigate the movement in taxi costs over the four years to December 2004. PwC's data suggested that changes in costs per kilometre over these four years may have been 2.5 to 3.0 per cent per annum less than CPI. That is, the data implied that an X-factor of 2.5 to 3 per cent has been achieved in practice.

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15 The average of the annual increases in GDP per hour worked from 2000/01 to 2004/05. Source: ABS Australian National Accounts National Income, Expenditure and Product, June Quarter 2005.

16 In its 2005 review of non-metropolitan private bus fares the Tribunal adopted a 1 per cent productivity growth assumption which it applied to the labour component of the Bus Industry Cost Index, reducing the rise in that index by 0.5 percentage points.

However, the ESC decided to adopt an X-factor of only 1 per cent, because it considered:

> …that a conservative value for the initial X factor in applying a CPI-X regulatory approach to the taxi industry would be 1 per cent per annum. An X factor of one per cent is approximately two-thirds of the midpoint of the range for X that would be determined using currently available data…An X factor of this magnitude allows the industry to retain a proportion of observed efficiency gains over the period from December 2000 to December 2004 and for taxi users to benefit in the form of a fall in real taxi fares.[17]

4.2.2 ACT

As part of its 2004 review of taxi fares in the ACT for the period 1 July 2004 to 30 June 2007, the ICRC released a draft determination that discussed possible approaches for determining taxi fares. One option was to include an X-factor to take account of productivity gains. The ICRC identified a range of areas in which efficiency or productivity gains might be made in the taxi industry, including:

- Possible use of the network's GPS system to allocate jobs and reduce dead running when the closest taxi does not accept the closest available booking
- Expanded use of the existing automated SMS booking service for taxis, which would provide the network with some cost savings by reducing the number of staff required to operate the call centre
- Reductions in some predominantly fixed costs, such as network services, as a result of the Government's plan to expand the fleet
- Further improvements in relative service quality and comparative value to increase demand for services and off-peak asset utilisation
- Reforms to reduce the cost of insurances[18]

However, in its final report the ICRC decided not to include an X-factor as it based its taxi fare increase largely on ABS indices that already incorporated economy-wide productivity gains. But it noted that it reserves the right to reassess the issue of including an X-factor to capture incremental gains in productivity in the taxi industry exceeding those economy-wide gains during its next fare review. [19]

4.3 Advantages and disadvantages of adopting a productivity adjustment

The Tribunal has identified two advantages of incorporating a productivity adjustment into the approach for setting taxi fares, including that:

- An appropriate X-factor that measures productivity will provide incentives to participants in the taxi industry to improve their productivity, as those who outperform the benchmark productivity allowance will benefit most.
- An appropriate X-factor will reduce the impact of fare rises on passengers.

The Tribunal has identified one disadvantage, which is that if the X-factor were set too high, it may inappropriately reduce the level of returns to industry participants.

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17 ESC Final Report, p 72.

18 ICRC, *Draft Determination Taxi Fares 1 July 2004 to 30 June 2007*, February 2004, p 68.

19 ICRC, *Final Report Determination of Taxi Fares for the period 1 July 2004 to 30 June 2007*, May 2004, p 50.

It will be necessary to apply the X-factor in a way that is consistent with the particular index that is being used. Some indices (such as the Taxi Cost Indices and the Wage Price Index) relate to inputs to production. However, productivity relates to the relationship between outputs and inputs. For these input indices, the Tribunal should use its estimate of the scope for productivity gains in the taxi industry to calculate the X-factor.

Other indices (such as the Consumer Price Index) relate to the outputs from production. These indices already incorporate the average productivity gain for the economy as a whole. For these indices, the tribunal should calculate an X-factor that represents the extent to which productivity gains for the taxi industry are expected to exceed the average gains for the economy as a whole.

The Tribunal welcomes comments on:

* ***The advantages and disadvantages of including an X-factor that accounts for productivity gains in setting taxi fares, including those identified by the Tribunal and others identified by stakeholders.***
* ***If such an X-factor is appropriate, how should the value of the X-factor be determined?***

5 FUND FOR EXPENDITURE ON SECURITY MEASURES

In its submission to the Tribunal, the NSW Taxi Drivers' Association (TDA) proposed a $1.00 levy on the flagfall of all taxi trips, to create a fund to pay for improvements to driver safety.[20] The TDA noted the recent murder of a Sydney taxi driver, and argued that current measures for driver security are substandard:

> We have screens that are filthy and non-functional. We have cameras that don't work, and a new regulation that prescribes a pre-drive check, an advice on the worksheet to not drive the cab, but no mandatory 'fix' by the operator. We can't lock the driver's door to prevent being pulled out and beaten up.

The TDA also noted that although security cameras are currently installed in some taxis:

> … the cameras in use date back to 1990's technology. Downloads are a problem, and fare evasion is not a reason to obtain a download. It's all done on an outdated analogue system which provides inadequate opportunity for driver checks[21].

5.1 NSW Taxi Council's response to the proposal

The NSW Taxi Council responded to this proposal in a supplementary submission to the Tribunal. It put the view that sufficient safety initiatives are already in place in NSW taxis, and that "the TDA has provided no grounds for a levy on taxi fares to raise money for a 'Taxi Safety Fund'".[22] Nevertheless, it noted that it "has asked the NSW Government to make cameras compulsory in all cabs and to allow the Quality Liaison Officers (Industry enforcement officers) to undertake random inspections of cameras to test they are working".[23]

5.2 Tribunal's comments on the proposal

The Tribunal understands that in 1998, the Ministry of Transport (MoT) increased fares to fund a number of driver safety initiatives, including the provision of protective screens and GPS in taxis. The MoT has indicated that data from the Bureau of Crime Statistics and Research showed a significant drop in the incidence of crime against taxi drivers following these security initiatives.[24]

More recently, the ICRC noted a number of initiatives that have been put in place in the ACT to minimise the risk to passengers and drivers. The ICRC identified security cameras in all taxis as one of the key initiatives, stating that:

> …the T8030 network system used by Canberra Cabs incorporates GPS dispatch methods. Security surveillance cameras in all vehicles transmit live digital images to base control in the event of a driver emergency. While there is little empirical evidence available in this area, the security cameras appear to have significant deterrent value against assault and fare evasion. The cameras do not protect the driver from assault or fare evasion, but they aid the prosecution of the offender after the event. Anecdotally, disputes over fares lead

20 TDA submission, March 2006, pp 28 and 36
21 TDA submission, March 2006, p 27.
22 NSW Taxi Council Supplementary submission, April 2006, p 4.
23 NSW Taxi Council Supplementary submission, April 2006, p 10.
24 Ministry of Transport Media Release, 10 February 2001.

> to a large proportion of assaults. Successful fare evasion prosecutions encourage the reporting of the offences and have additional deterrent value."[25].

The Tribunal is sympathetic to the need to ensure driver safety, and would like to investigate the usefulness and feasibility of implementing the TDA's proposal. However, it considers that if a driver safety fund were to be set up, it should be dedicated to a defined range of security initiatives. In addition, once sufficient funds were raised to implement these initiatives, the levy on the flagfall would need to be removed. The TDA's proposal that the levy be charged indefinitely with funds to be directed to driver payments is inconsistent with the regulatory framework adopted by the Tribunal.

In addition, the Tribunal notes that if such a fund were to be set up, it may be necessary to exclude some vehicles that are already fitted with security measures from being funded in this manner. This may create inequities for those taxi operators who have installed security features at their own cost.

The TDA's calculations suggest that it would take four months to raise the $16 million it estimates would be necessary to install effective on-line security camera systems in all taxis. The Tribunal has not been able to verify this amount, or the period over which it would be raised.

Limited information is available to assess the impact of this scheme on customers, given that the average fare formula is an approximation. However, there would be a greater impact on customers who use taxis for relatively short trips. Anecdotal evidence suggests that pensioners and people on low incomes make up a significant proportion of this group of customers.

The Tribunal welcomes comments on:

* ***Whether a $1 levy on the flagfall of all taxi fares to fund driver security measures is warranted.***
* ***Whether the installation of effective on-line security camera systems in all taxis would improve driver safety.***
* ***Which taxis should be entitled to use the fund – that is should taxis with existing security installations be excluded?***
* ***What security initiatives should be funded by the levy?***
* ***How much money should be raised and when should the fund cease operating?***
* ***Who should administer the fund?***
* ***What would be the financial impact on passengers?***

25 ICRC Draft Determination, February 2004, p 28.

6 OTHER ISSUES

In addition to the issues raised in the previous chapters, the Tribunal intends to consider three other issues as part of its 2006 review of taxi fares. These other issues include:

- The collection of additional information.
- The need for a regular review of the form of regulation.
- The elements of the 'average fare'.

6.1 Collection of additional information

Simply increasing the current taxi fares using any of the methodologies discussed in this issues paper implies that the current level of fares precisely reflects the efficient costs of providing taxi services, including providing industry participants with appropriate returns for the risks they bear. The Tribunal cannot confidently accept this proposition. Rather, it considers that additional independent information about costs, revenues and profitability within the taxi industry needs to be collected to ensure that the prices for taxi services matches the costs that are borne by participants in the industry.

The Tribunal welcomes comments on appropriate independent sources of information on costs, revenue and profitability within the taxi industry

6.2 Need for a regular review of the form of regulation

The Tribunal considers that it needs to undertake regular reviews of the form of regulation used to recommend taxi fares. These reviews should include consideration of the most relevant index, and the methodology for calculating that index.

These reviews could occur every third or fifth year, reflecting regulatory practice in setting medium to long-term price paths in other regulated businesses.

The Tribunal welcomes comments on the appropriate frequency of these reviews

6.3 Elements of the 'average fare'

Whichever index is used to measure the change in the costs of providing taxi services, under the current approach this change is applied to an 'average fare' that reflects the different components of taxi fares. However, since the Tribunal began reviewing the taxi industry in 2001, three different formulations of the 'average fare' have been used for urban areas (see the notes to Table 2.1). Changes have been made to the average length of a trip, and to the proportion of trips that attract a booking fee, in response to submissions by stakeholders.

While the average urban fare increased by 20.6 per cent between 2000 and 2005,[26] the flagfall and radio booking fee – the fixed elements – rose by 19.1 per cent and 27.3 per cent respectively. The distance rate and waiting time rate – the variable elements – increased by 22.7 per cent 11.0 per cent respectively.

[26] Calculated using 2005 assumptions regarding waiting time, length of trip, and proportion of journeys that attract a booking fee.

The assumptions used to calculate an average rural fare have not changed. This fare increased by 19.8 per cent between 2000 and 2005, with flagfall rising 15.8 per cent, the radio booking fee rising 38.5 per cent, the distance rate increasing 25.2 per cent, and the waiting time rate rising 11.0 per cent.

The Tribunal considers that the 'average fare' approach may not be the best approach for regulating taxi fares. An alternative approach would be to use a 'Master Fare Schedule', as the Tribunal uses in regulating fares for other modes of transport. Under a Master Fare Schedule, the overall percentage fare rise recommended by the Tribunal is applied to each of the fare components, rather than to an 'average fare' within which some components are increased more than others.

Because of the limitations of the meters currently installed in NSW taxis, the flagfall and radio booking fee components of taxi fares must be changed in 5 cent increments. This means that it may not be possible to increase each component by the exact overall percentage fare rise recommended by the Tribunal. Instead, particular components may need to be increased by slightly more or less than the overall fare rise recommended in a given year.

To ensure that the price of some components doesn't increase faster than others, the Master Fare Schedule would maintain a record of what each fare component was prior to rounding to the nearest 5 cents. The fare increase recommended in the subsequent year would then be applied to this unrounded price, so that 'rounding up' the price of a component year after year does not cause it to increase out of step with the other fare components. In this way, a Master Fare Schedule would maintain the existing balance between the different components of taxi fares.

The Tribunal welcomes comments on:

- ***The current balance between the fixed and variable elements that are used to calculate the average fare to which the index is applied***
- ***Whether there would be value in adopting a Master Fare Schedule in place of the 'average fare' concept.***

ATTACHMENT 1 TERMS OF REFERENCE

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.

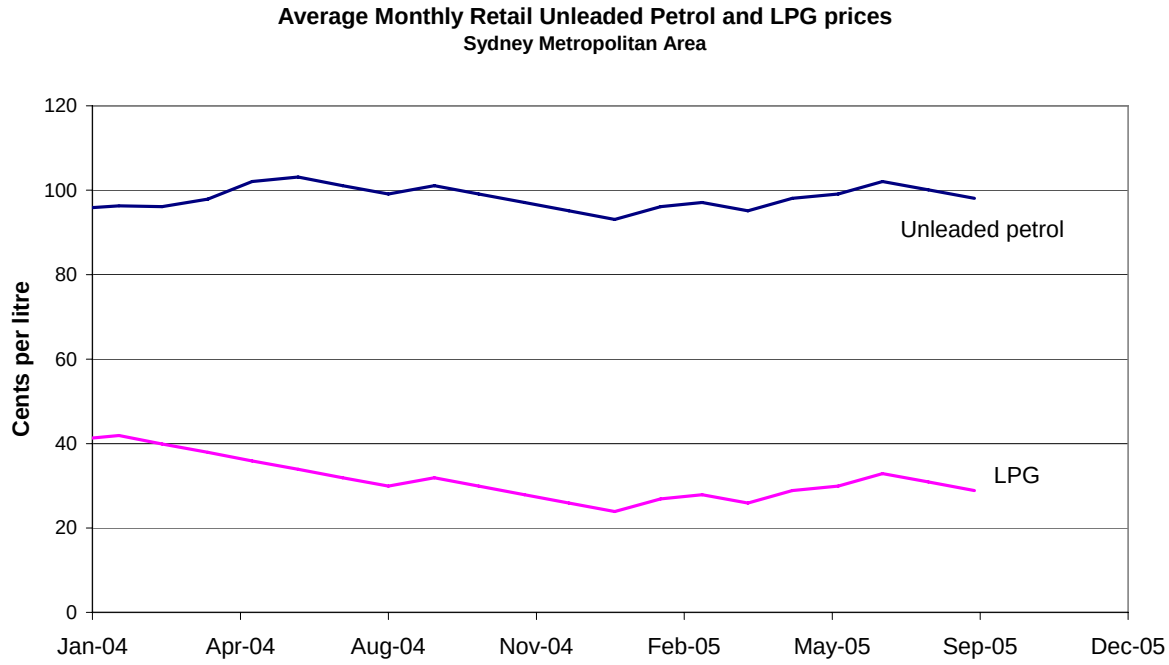
A final report is to be provided to the Minister for Transport by June each year.

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 Ministry of Transport.

ATTACHMENT 2 HISTORICAL LPG AND UNLEADED PETROL PRICES



Source: FuelTrac, www.fueltrac.com.au.

ATTACHMENT 3 CALCULATIONS FOR IPART MODIFIED TAXI COST INDEX

The Tribunal's modified cost index contains some items that are based on actual costs incurred in the taxi industry, and others that are rolled forward based on ABS indices such as the CPI and its components and the Wage Price Index. This attachment explains how the rise in the cost of individual items in the index has been calculated, and where possible, how the actual cost of an item has been calculated.

Vehicle lease payments

Vehicle lease costs reflect part of the capital investment required to put a taxi into service. The calculation of the vehicle lease payment is based on the following assumptions:

- the vehicle cost is taken to be the average cost of Ford Falcon Forte and Futura vehicles
- in urban areas 50 per cent of vehicles are assumed to be new vehicles, 50 per cent two year old second-hand vehicles. In country areas all vehicles are assumed to be two year old second-hand vehicles
- the purchase is financed at market lease rates on vehicles
- the term of the lease is five years for new vehicles and four years for second-hand vehicles
- there is a residual value of 10 per cent at the end of the lease.

The lease payment is calculated in Excel using the PMT function.

Insurance costs

Insurance costs reflect the various forms of insurance that taxi operators carry, including third party (greenslip), third party property or comprehensive car insurance, and workers compensation insurance.

The urban index assumes that half of urban operators purchase comprehensive insurance and half purchase third party property damage insurance. All insurance costs used for this item are the averages of quotes provided by the Taxi Council.

Urban insurance costs = 0.5 × (comprehensive insurance cost + third party property insurance cost) + greenslip cost + workers compensation insurance cost

= 0.5 × ($9,276 + $3,547) + $4,497 + $2,540

= $13,448

The country index assumes that all taxis have comprehensive insurance.

Country insurance costs = comprehensive insurance cost + greenslip cost + workers compensation insurance cost

= $4,416 + $2,249 + $1,676

= $8,341

Government charges

This item includes vehicle registration and operator licence accreditations. Annual vehicle registration costs are set by the Roads and Traffic Authority, accreditation renewal fees by the MoT. The total amount for this cost item is,

Government charges = vehicle registration + MoT accreditation fee
= $551 + $260
= $811.

Network fees

All operators are required by law to belong to an authorised network.

For the urban cost index, the Taxi Council provided network fees for eight Sydney networks (covering a total of 4,925 taxis), and one network in each of Newcastle (159), Wollongong (137) and the Central Coast (87). The average of the network fees, weighted by number of taxis, is the network fee that is included in the urban cost index. For 2006 this was $6,921.

For the country index, quotes for network fees covered six country towns (142 taxis). The towns were Albury, Armidale, Bathurst, Coffs Harbour, Tamworth and Wagga Wagga. The weighted average network fee in the country index is $10,391.

Plate lease costs

Taxi plate (or licence) lease fees refer to the cost of leasing a taxi plate. The lease cost is calculated using two components: a plate lease interest rate and average prices on the actual sale and purchase of plates (known as plate transfer values).

As in the past, the lease rate was provided by Arab Bank Australia, a major lender to investors in taxi plates; the rate is 8.20 per cent.

Plate transfer values are provided by the Ministry of Transport. The weighted average plate value for the urban area over the 12 months to end March 2006 is $264,314. Therefore the urban plate lease cost is 8.20% × $264,314 = $21,674.

As far fewer plates are bought and sold in country areas the average transfer value data is less reliable, therefore this cost item is not calculated from source data. Rather the change in the urban plate lease cost is applied to the existing amount in the country cost index; for 2006 this was a rise of 4.17 per cent.

Establishment costs

Establishment costs refer to the costs incurred in preparing a vehicle to operate as a taxi. These costs include conversion to LPG and fit out of the vehicle (the installation of roof signs, a meter, a payments mechanism, and livery).

For the urban cost index, this cost item is calculated as the LPG conversion cost plus the fit out cost, spread over four years. The Taxi Council provides quotes for each of LPG conversion and fit out from four networks and the average of each is used. For 2006 this cost item is,

Urban establishment costs = (LPG conversion + fit out) ÷4
= ($2,963 + $4,101) ÷4
= $1,766.

As has been the case in previous reviews, the Taxi Council has not obtained quotations for this item for country areas. Instead, it has applied the percentage change in this item in the urban index to the amount already included in the country index; this was an increase of 10.4 per cent in 2006.

Maintenance labour

The maintenance labour cost item is not calculated directly from source data; rather the amount already in the index for this item for the previous year is increased by the percentage increase in the retail rate charged for labour for motor vehicle servicing, for which the Taxi Council provides a series of quotes. This labour rate increased by 3.63 per cent to the end of March 2006 in urban areas, hence the maintenance labour item in the index also rose by this pecentage. In the country the hourly rate and hence the maintenance labour item increased by 4.41 per cent.

Vehicle parts and panels

Consistent with the approach adopted by the Tribunal in 2004, the change in the motor vehicle parts and accessories component of the CPI has been applied to this cost item for both urban and country indices rather than calculating the value of this item from the cost of a basket of goods. The increase in the motor vehicle parts and panels component of the CPI was 2.69 per cent to the end of March 2006.

Cleaning

Taxi operators detail their vehicles prior to inspection three times a year in urban areas and twice a year in the country. Operators also pay for daily cleaning in country areas (daily wash is the responsibility of the driver in urban areas; see the cleaning cost item later in this attachment).

For the urban index, the Taxi Council provided a quote for car detailing at $160, therefore the total cost is 3 × $160 = $480.

For the country index this item is not based on quotes; rather the amount already in the index is increased in line with the movement in the CPI, that is a rise of 2.64 per cent.

Tyres

This cost item assumes that the average urban taxi travels 175,000kms a year, the average country taxi travels 125,000kms a year and that average tyre life is 30,000kms. The tyre on which the tyre cost in the index is based on is a Dunlop Monza SP 200E R16 which in 2006 had an average retail price of $168. The total tyres cost item for the urban index is therefore 4 × $168 × (175,000 ÷ 30,000) = $3,920. The cost in the country index is $2,800.

Operator's salary equivalent

Operator salary equivalent recognises the operator's labour expended to operate a taxi business. The change in this item is determined by changes in the ABS Wage Price Index; the rise in the WPI to the end of March quarter 2006 was 4.09 per cent.

Driver entitlements

This cost item allows for driver entitlements for permanent bailee drivers and its calculation is based on actual entitlements. Permanent drivers receive five weeks annual leave and eight days of sick leave per annum according to the NSW Industrial Relations Commission (IRC) Contract Determination. The current IRC determination sets a holiday rate of $649.05 per week, and a sick leave rate of $130.27 per day. Therefore the total cost item in the index for driver entitlements is 5 × $649.05 + 8 × $130.27 = $4,287.

Uniforms

The change in the cost of uniforms is represented by the change in the clothing and footwear component of the CPI. This fell by 1.55 per cent over the 12 months to March 2006.

Other operator costs

Costs that fall into the 'other' category include office equipment, telephone, professional services and training costs. These costs are adjusted by the change in the CPI, which rose by 2.64 per cent.

LPG fuel

The annual LPG cost in the urban index is based on a taxi travelling 175,000kms with a fuel consumption of 5 km/L. The Taxi Council provides detailed LPG fuel data sourced from GoGas which contains the average daily and monthly LPG prices for 29 locations covered by the urban cost index. The average LPG price over the 12 months to end March 2006 was 49.07 cents per litre. Therefore the total urban fuel cost is:

LPG cost = average LPG price/L × (km travelled ÷ fuel consumption)
= $0.4907 $/L × (175,000 ÷ 5 km/L)
= $ 17,175

In the country index, it is assumed that a taxi travels 125,000 kms, with a fuel consumption of 5 km/L. The GoGas data provided by the Taxi Council, which covers six country locations, indicates that the average fuel price over the 12 months to end March 2006 was 55.01 cents per litre; thus the total LPG cost in the country index is $13,753.

Drivers' notional wages

The amount allocated to Drivers' notional wages in the index is not calculated each year from source data. Rather the base amount already in the index for this item is increased by the rise in the ABS Wage Price Index, which was 4.09 per cent for the four quarters to March 2006.

Cleaning

The value of driver cleaning costs in the cost index is not calculated each year from source data; rather the amount allocated to cleaning within the index is increased by the rise in the CPI, which was 2.64 per cent to March 2006.