

## **Review of cost indices for non-metropolitan buses and private ferries**

Alternative approaches to calculating the Bus Industry Cost Index and Commercial Vessel Association Cost Index

Transport — Issues Paper  
August 2007

© Independent Pricing and Regulatory Tribunal of New South Wales 2007

This work is copyright. The *Copyright Act 1968* permits fair dealing for study, research, news reporting, criticism and review. Selected passages, tables or diagrams may be reproduced for such purposes provided acknowledgement of the source is included.

ISBN 978-1-921328-05-3 DP93

The Tribunal members for this review are:

Dr Michael Keating, AC, Chairman

Mr James Cox, Full Time Member

Ms Sibylle Krieger, Part Time Member

Inquiries regarding this document should be directed to a staff member:

Ineke Ogilvy (02) 9290 8473

Dion Jackomas (02) 9290 8442

Fiona Towers (02) 9290 8420

Independent Pricing and Regulatory Tribunal of New South Wales

PO Box Q290, QVB Post Office NSW 1230

Level 2, 44 Market Street, Sydney NSW 2000

T (02) 9290 8400 F (02) 9290 2061

[www.ipart.nsw.gov.au](http://www.ipart.nsw.gov.au)

## Invitation for submissions

The Tribunal invites written comment on this document and encourages all interested parties to provide submissions addressing the matters discussed.

Fare proposals from the Bus and Coach Association and Commercial Vessel Association are due by 14 September 2007. Public submissions are due by 28 September 2007.

We would prefer to receive submissions by email <transport@ipart.nsw.gov.au>.

You can also send comments by fax to (02) 9290 2061, or by mail to:

Review of cost indices for non-metropolitan buses and private ferries  
Independent Pricing and Regulatory Tribunal  
PO Box Q290  
QVB Post Office NSW 1230

Our normal practice is to make submissions publicly available on our website <www.ipart.nsw.gov.au>. If you wish to view copies of submissions but do not have access to the website, you can make alternative arrangements by telephoning one of the staff members listed on the previous page.

We may choose not to publish a submission – for example, if it contains confidential or commercially sensitive information. If your submission contains information that you do not wish to be publicly disclosed, please indicate this clearly at the time of making the submission. The Tribunal will then make every effort to protect that information, but it could be subject to appeal under freedom of information legislation.

If you would like further information on making a submission, the Tribunal's submission policy is available on our website.



# Contents

<b>Invitation for submissions</b>	<b>iii</b>
<b>1 Introduction</b>	<b>1</b>
1.1 Purpose of this Issues Paper	1
1.2 Timetable for the review	2
<b>2 Why the Tribunal is reviewing the cost indices and the scope of the review</b>	<b>3</b>
2.1 The intended scope of the review	4
2.2 Why the Tribunal has decided to retain the cost index approach	5
<b>3 Bus Industry Cost Index</b>	<b>7</b>
3.1 The current and alternative approaches for inflating each cost item	7
3.2 Relative weighting of the cost items in the index	13
3.3 Need to adjust the overall cost change in the BICI to account for productivity gains	13
<b>4 Commercial Vessel Association Cost Index</b>	<b>15</b>
4.1 The current and alternative approaches for inflating each cost item	15
4.2 Need to adjust the overall cost change in the CVACI to account for productivity gains	20
4.3 Expected impact of methodology changes	21
<b>Glossary</b>	<b>22</b>



# 1 Introduction

Each year the Independent Pricing and Regulatory Tribunal of NSW (the Tribunal) conducts annual reviews of maximum fares for non-metropolitan private buses and private ferries under a five-year standing reference received from the Premier in 2002. The Tribunal's recommendations on fare increases for these services are calculated using two industry-specific cost indices: the Bus Industry Cost Index (BICI) and the Commercial Vessel Association Cost Index (CVACI).<sup>1</sup>

In the past, the Tribunal has expressed concerns about the cost reflectivity of the BICI, and has found it difficult to obtain sufficient information for calculating changes in the CVACI. The Tribunal is also concerned about the difficulties it has in verifying the changes in these indices, as they rely heavily on information provided by stakeholders.

The Tribunal is now reviewing the way it calculates the annual change in each of these indices to address these concerns, as the first stage of its 2007 review of fares for non-metropolitan private buses and private ferries. The Tribunal's aim is to improve the independence, cost reflectivity and transparency of the indices and to align its approach to calculating its recommended fare increases across transport modes where possible.

## 1.1 Purpose of this Issues Paper

The Tribunal has developed a number of preliminary views on alternative inflators for the costs included in the BICI and CVACI, based on the inflators it uses in the taxi industry. This Issues Paper explains these alternative inflators and seeks stakeholder comment on their appropriateness for application to the non-metropolitan bus and private ferry industries.

The Issues Paper is structured as follows:

- ▼ Chapter 2 explains in more detail why the Tribunal is reviewing its approach to calculating the annual change in the cost indices, and outlines the scope of the review

---

<sup>1</sup> The Tribunal also makes recommendations on funding for non-metropolitan private buses operating under non-commercial contracts by calculating the revenue required for each bus using a model developed by PricewaterhouseCoopers. The Tribunal is **not** considering changing its approach to making these recommendations as part of this review. See Chapter 2 for more information.

- ▼ Chapter 3 describes the current approach to calculating the annual change in the BICI and seeks comment on the Tribunal's preliminary views on modifying this approach
- ▼ Chapter 4 describes the current approach to calculating the annual change in the CVACI and seeks comment on the Tribunal's preliminary views on modifying this approach.

## 1.2 Timetable for the review

As noted above, this Issues Paper is the first stage in the Tribunal's annual review of fares for non-metropolitan buses and private ferries. The Tribunal invites the Bus and Coach Association and the Commercial Vessel Association to comment on the possible changes to the BICI and CVCAI discussed in this Issues Paper at the same time as they make their annual fare proposals. Other stakeholders' submissions should address both the possible changes to the cost indices and the fare proposals.

The Tribunal intends to engage a consultant to assist its consideration of the appropriate weighting of costs in the BICI (see Chapter 3). The Tribunal will provide stakeholders with an opportunity to comment on the consultant's views.

The review will conclude in mid-December, when the Tribunal provides its recommendations to the Minister for Transport.

An indicative timetable for the review is set out below. The timetable may change during the course of the review. The Tribunal will maintain an up-to-date review timetable on its website ([www.ipart.nsw.gov.au](http://www.ipart.nsw.gov.au)).

**Table 1.1 Indicative review timetable**

Task	Expected date
Release Issues Paper	17 August 2007
Engage consultant	Late August
Receive fare submissions	14 September
Receive public submissions	28 September
Release consultant report	October
Hold public forum	Late October
Receive submissions on consultant report	Early November
Report recommendations to Minister	Mid December

**Note:** Dates not specified will be finalised closer to the expected time and available on the Timetables section of the Tribunal's website.

## 2 Why the Tribunal is reviewing the cost indices and the scope of the review

The current approaches for calculating recommended fare increases for non-metropolitan private buses and private ferries have been in place for approximately five years, and the Tribunal considers that now is an appropriate time to review these approaches. In general, the Tribunal believes it is good regulatory practice to regularly review its approach to regulation in all industries. The time period between such reviews should achieve a balance between providing regulatory certainty and ensuring that the approach is as relevant and robust as possible.

More specifically, several aspects of the current approaches to regulation in the non-metropolitan private bus and private ferry industries indicate that a review is warranted. The Tribunal has expressed concerns about the BICI for a number of years. The Tribunal is not convinced that the costs included in this index reflect efficient operator costs or represent the current cost structure of the non-metropolitan private bus industry. In its report on the 2006 fare review, the Tribunal stated its intention to review its regulatory approach for non-metropolitan private buses this year.<sup>2</sup> In relation to the CVACI, the Tribunal has previously noted that it is difficult to obtain sufficiently detailed information to calculate changes in this index. It has also suggested that the costs of the current approach to regulating private ferry fares may outweigh the benefits.<sup>3</sup>

In addition, the Tribunal has recently reviewed its approach to regulation in the taxi industry. This resulted in the Tribunal deciding to continue to use an industry-specific cost index (with an adjustment for expected gains in labour productivity), but to make a range of changes to the inflators used in calculating the annual change in this index. The Tribunal considers that these changes will lead to an approach to regulation that is:

- ▼ more independent, cost reflective and robust than the previous approach
- ▼ recognises the diversity of businesses operating in the industry
- ▼ minimises the information requirements on operators.

Given the similarities in the type of costs and the diversity of industry participants across the taxi, non-metropolitan bus and private ferry industries, the Tribunal

---

<sup>2</sup> IPART, *Review of non-metropolitan fares for private buses in NSW from 2 January 2007 – Report to the Minister for Transport*, December 2006, p 17.

<sup>3</sup> IPART, *Review of fares for private ferries in NSW from 2 January 2007 – Report to the NSW Minister for Transport*, December 2006, p 2.

considers that it is desirable to align the approaches used in these industries where possible.

The Tribunal is aware that a taskforce comprising the Ministry of Transport and the Bus and Coach Association (representing the bus industry) is currently reviewing the contracting, funding and service planning arrangements for rural and regional bus services, as part of a broad process of bus industry reform in NSW. After a period of consultation and testing, this review should lead to the development of new contracting arrangements, which will be progressively rolled-out from 2008.<sup>4</sup>

The Tribunal expects that the number of non-metropolitan bus operators subject to annual reviews and recommendations by the Tribunal will decline as operators enter into the new contracting arrangements.<sup>5</sup> However, based on the timeframes for the review process, the Tribunal anticipates that there will be some operators that remain outside the new bus contract system, at least for the next few years. For this reason, the Tribunal considers it worthwhile for it to undertake its own review of the regulatory approach.

## 2.1 The intended scope of the review

The Tribunal intends to review aspects of the existing indices for non-metropolitan private buses on commercial contracts and private ferries (the BICI and CVACI). The Tribunal hopes that its review will identify a more robust and transparent approach to calculating the annual change in these indices without increasing the cost of regulation or imposing an unnecessary burden on smaller operators. For this reason the review will largely focus on ensuring that the inflators used in the indices are independent, transparent and where relevant, aligned with those used in the Taxi Cost Index.

The Tribunal also intends to reassess the relative weightings of the costs in the BICI as part of its review, to ensure that the BICI reflects the cost structure of non-metropolitan bus operators. However, it does not propose to reconsider the relative weightings of the costs in the CVACI at this stage, because it fixed these weightings for five years in the 2006 review. Nevertheless, the Tribunal will consider expanding the scope of the review to include a reassessment if stakeholders request it to do so, perhaps because they consider that the weights do not fully reflect their cost structure.

Please note that the scope of the review does not include the approach used to calculate funding requirements for non-metropolitan private buses under non-commercial contracts (the PWC approach). Although the Tribunal has expressed concern with this approach in the past, it has decided not to review this approach at this stage. The Tribunal expects that including the PWC approach in this current

---

<sup>4</sup> Ministry of Transport website <<http://www.transport.nsw.gov.au/busreform-R-R/>> 2 August 2007.

<sup>5</sup> Once operators are transferred to the new contract system the Tribunal is responsible for determining the fares for services directly.

review would involve a significant degree of overlap with the Ministry of Transport review of funding and contracting arrangements currently underway (see above). For the 2007 review, the Tribunal will use the same approach to recommending funding for non-metropolitan private buses under non-commercial contracts as it did last year, pending the outcome of the reform process. The Tribunal expects that the Ministry of Transport will share the findings of its funding review with the Tribunal so that the Tribunal can reconsider its approach in the future.

## 2.2 Why the Tribunal has decided to retain the cost index approach

The Tribunal has decided to limit its review to aspects of the BICI and the CVACI rather than undertaking a more fundamental review of the form of regulation. In coming to this decision, the Tribunal recognises that the current approach to calculating the BICI and CVACI has a number of disadvantages, including:

- ▼ it is time-consuming and costly for stakeholders, as they are required to collect and provide to the Tribunal a significant amount of information on an annual basis
- ▼ although based on actual costs in the industry as a whole, the movement in the industry's index is unlikely to reflect the costs of any given operator
- ▼ the required increases are calculated by the industries themselves and are therefore, not calculated on an arms length basis
- ▼ fare increases that pass through increases in an industry cost index do not pass through to customers in lower prices any efficiency gains that are achieved.

The Tribunal also recognises that a more traditional form of regulation, such as a building block approach applied to each individual operator, would overcome many of these problems. However, such an approach would also come at a significant cost to industry participants.

In addition, the Tribunal considers that some of the characteristics of the non-metropolitan bus and private ferry industries make a more intrusive and costly form of regulation inappropriate. The private operators whose fares are governed by the BICI and CVACI vary widely in size and sophistication – from large intercity coach or tourist/commuter ferry providers, to those offering only more limited services for local communities. In addition, many service providers offer services with regulated fares as well as services with unregulated fares, which makes regulatory accounting more difficult and costly.

In deciding not to consider a more traditional form of regulation, the Tribunal has had regard to the fact that:

- ▼ many of the operators of non-metropolitan private bus and private ferry services are small businesses that lack the resources to undertake substantial data collection

- ▼ there are a large number of private bus operators and for many of them, the current regulatory arrangements are transitional as they begin to move onto new bus contracting arrangements
- ▼ there are some legal contractual requirements that specify that these indices will be used for setting fares.

Also, the index approach has some efficiency advantages. Fares are adjusted according to changes in an input price index for the industry as a whole. If an operator can make efficiency improvements that result in its costs increasing by less than the change in the input cost index, it can increase its profits. This provides an incentive for operators to make efficiency improvements.

Many of the Tribunal's concerns about the BICI and CVACI mirror those it had about the Taxi Cost Index. The Tribunal's response to these concerns in relation to the Taxi Cost Index was to use inflators that can be independently obtained and verified, and to reconsider the relative weighting of costs to ensure it better reflects the industry cost structure. Given the similarities among the type of costs and the diversity of industry participants across the taxi, non-metropolitan bus and private ferry industries, the Tribunal's recent decisions in relation to the approach used to calculate recommended taxi fare increases provide a useful starting point for a review of the approaches used for non-metropolitan buses and private ferries.

## 3 Bus Industry Cost Index

The Bus Industry Cost Index (BICI) is currently used to calculate recommended changes in maximum fares for non-metropolitan private buses operating under commercial contracts. The BICI is composed of six cost items. Each year, a range of inflators is used to estimate the change since the previous year in each of these cost items. The weighted average of the change in these six items is then used to calculate the overall cost change for the review period that is recommended by the Tribunal.

At this stage, the Tribunal has not made any decisions on changes to the BICI. However, it has identified a range of alternative inflators for the cost items and some changes to the definition of the cost items, which it will consider during this review. It will also consider the weightings given to each cost item in determining the overall cost change for the review period, and the need for this overall change to be adjusted to take account of expected productivity gains in the non-metropolitan private bus industry.

The alternative inflators were selected because they meet the Tribunal's criteria of being based on independent and verifiable data that is publicly available where possible. However, inflators must also be reasonable estimates of changes in efficient costs for operators. In addition, the Tribunal considers that there is value in using consistent inflators across the various transport industries it regulates. Therefore, where it considers that the changes in costs in the non-metropolitan private bus industry are likely to be similar to those in other transport industries, it has selected an alternative inflator that aligns with the inflator used in the other industries.

The section below discusses the current approach to inflating each of the cost items included in the BICI, and the alternative inflators the Tribunal is considering. The subsequent sections discuss the relative weightings of the cost items, and the need to adjust the overall cost change to account for productivity gains.

### 3.1 The current and alternative approaches for inflating each cost item

The BICI includes the following cost items:

- ▼ Bus capital costs
- ▼ People costs
- ▼ Bus insurance and registration
- ▼ Bus lubricants

- ▼ Bus repair and maintenance
- ▼ Other costs.

Each of these cost items, the current approach to inflating the item and the alternative inflators are described below. In general, the Tribunal seeks comment on whether the alternative inflators will reflect the changes in operators' costs. It also seeks comment on some specific questions, which are listed at the end of each section below. Table 3.1 (at the end of this section) provides an overview of the possible changes to the inflators.

### 3.1.1 Bus capital costs

Bus capital costs are specified as the monthly repayment on a five-year loan used to finance the purchase and fitting of the bus. The interest rate used is that of a 10-year bond rate, and the principal of the loan is determined as the price of a 'Mercedes 0405NH/0500 Chassis' and Custom Coach Body. These prices are currently provided via quotes obtained by the Bus and Coach Association (BCA).

The Tribunal accepts that the annual change in bus capital costs is adequately captured by calculating an estimated change in loan repayments in each year. However, it is not aware of persuasive reasons why the change in costs should be based purely on quoted prices of specific buses.

The Tribunal is considering an alternative approach to estimating the annual change in bus capital costs, which is to apply an inflator – such as the annual change in the 'motor vehicles' expenditure class of the CPI – to the base cost of a bus already included in the index. Alterations to the bus could similarly be inflated by the 'motor vehicle parts & accessories' expenditure class of the CPI. This approach would be consistent with the method the Tribunal now uses in the taxi industry. Although the CPI expenditure categories include much more than expenditure on buses they are readily available and verifiable.

The Tribunal is also considering continuing to use a Commonwealth Bond Rate as an appropriate cost inflator. This is consistent with the inflator used to measure the changes in interest in the taxi industry. However, the Tribunal would like input on whether 10 years is the most appropriate term of the bond rate.

The Tribunal seeks comment on the following questions:

- 1 Are the 'motor vehicles' and 'motor vehicles parts & accessories' expenditure classes of the CPI appropriate inflators for bus capital costs?
- 2 Is a 10-year bond rate an appropriate interest rate for bus capital costs, or would a five-year rate that aligns with the term of the loan be preferable for this item?

### 3.1.2 People costs

People costs consist of the award rates of pay, occupational superannuation, payroll tax and workers compensation insurance. Currently, changes in the award rates of pay are determined by the 'Motor Bus Drivers and Conductors State Award'. Superannuation and payroll tax are specified as a fixed proportion of rates of pay, so changes in these costs are also determined with reference to this award. Changes in the cost of workers compensation insurance are determined by quotes obtained by the BCA.

The Tribunal has identified two alternative inflators for people costs that are independent and publicly available: changes in Average Weekly Earnings (AWE) and changes in the Wage Price Index (WPI). Both these indices measure wage and salary costs and exclude non-wage costs such as superannuation. In other industries, the Tribunal has preferred to use the WPI, because it measures the wage and salary costs for an employer for a fixed quantity and quality of labour. This means that, unlike the AWE, it is unaffected by compositional changes in the workforce. (The key differences between these two indices are discussed in more detail in Chapter 4.)

The Tribunal's preliminary view is that the WPI would better meet its criteria of an independent and verifiable measure and would be consistent with its approach in the taxi industry. As superannuation and payroll tax are determined as a proportion of wages, the Tribunal's preliminary view is that these measures could also be inflated by the WPI. Workers compensation insurance is discussed below.

The Tribunal seeks comment on the following question:

- 3 Is the Wage Price Index (WPI) a suitable inflator for the people costs item in the BICI?

### 3.1.3 Bus insurance and registration

The bus insurance and registration cost item consists of green slips, comprehensive insurance and registration. Changes in the cost of green slips and comprehensive insurance are currently determined by insurance quotes obtained by the BCA, while changes in registration costs are measured by comparing the actual costs charged by the RTA from year to year.

The Tribunal's preliminary view is that workers compensation, green slips and comprehensive insurance items could be amalgamated into a single 'insurance' cost in order to simplify the index. The 'insurance services' sub group of the CPI could then be used as an inflator for this item.

As registration is a small component of the overall index, the Tribunal's preliminary view is that it could be amalgamated into the 'other' category and be inflated by the change in the CPI. This would be consistent with decisions made by the Tribunal for taxis and would allow for a streamlined index which is more user friendly for the Tribunal and stakeholders alike.

The Tribunal seeks comment on the following questions:

- 4 Is the 'insurance services' sub group of the Consumer Price Index (CPI) an appropriate inflator for bus insurance costs?
- 5 Are there any reasons why registration costs should not be amalgamated into the 'other' category and inflated by the change in the Consumer Price Index (CPI)?

#### 3.1.4 Bus lubricants

Changes in the bus lubricants cost item are currently estimated as the change in the average NSW diesel fuel cost compiled by the BCA based on data it obtains from Mobil.

However, Fueltrac provides an independent source of price monitoring for all fuel types, including non-metropolitan diesel fuel. The Tribunal has recently used Fueltrac data to measure the change in LPG costs for its review of taxis fares. The Tribunal is considering whether the use of Fueltrac data would better meet its criteria for independence and consistency than the use of data obtained directly by the BCA.

The Tribunal seeks comment on the following question:

- 6 Is the change in non-metropolitan wholesale diesel price an appropriate inflator for the bus lubricant costs item, or should the Tribunal consider using other Fueltrac data, such as average NSW or diesel pump prices?

#### 3.1.5 Bus repair and maintenance

Bus repair and maintenance consists of the cost of a Mercedes major service and tyre list price. The annual change in this cost is currently measured via quotes obtained by the BCA from Mercedes Benz and Western Tyre and Wheel Pty Ltd respectively.

The Tribunal is considering whether the movement in this cost item would be adequately captured by applying an inflator, such as the annual change in the 'motor vehicle repair and servicing' expenditure class of the CPI, to the base cost already included in the index. Changes in tyre costs could be estimated using the 'motor vehicle parts & accessories' expenditure class of the CPI. This approach would be consistent with the method used by the Tribunal for recommending taxi fares.

The Tribunal seeks comment on the following question:

- 7 Are the 'motor vehicle repair and servicing' and 'motor vehicle parts & accessories' expenditure classes of the Consumer Price Index (CPI) appropriate measures of the change in the costs of bus repair and maintenance?

### 3.1.6 Other costs

The 'other costs' item in the index is currently inflated using the change in the CPI over the period.

The Tribunal's preliminary view is that the inflator used for other costs not be changed from the CPI, as this measure appears to meet all of the Tribunal's criteria.

The Tribunal seeks comment on the following question:

- 8 Is there any information to suggest that using the change in the Consumer Price Index (CPI) to inflate 'other' costs in BICI will systematically over or under estimate the changes in these costs?

Table 3.1 Summary of BICI costs and inflators

	2006 weight	Current inflator	Possible new inflator
<b>Bus Capital Costs</b>	<b>16.75</b>		
Monthly lease payment:			
Chassis		Quotes provided by BCA obtained from supplier	'Motor Vehicles' Expenditure class of CPI
Custom Coach Body		Quotes provided by BCA obtained from Custom Coaches	'Motor Vehicles Parts & Accessories' Expenditure class of CPI
Lease Interest (10 Year Bond Rate)		10-year Government Bond Rate	Commonwealth Bond Bank Bill Swap Reference Rate
<b>People Cost</b>	<b>48.90</b>		
Award rate of Pay	40.71	Motor Bus Drivers and Conductors State Award	WPI
Occupational Superannuation	3.61	9% of Wages	WPI
Pay Roll Tax - Wages	2.22	6% of Wages	WPI
Workers Compensation	2.36	Quote from AEI Insurance Brokers	Amalgamated into Insurance cost item and inflated by 'Insurance Services' sub group of CPI
<b>Bus Insurance &amp; Rego</b>	<b>3.89</b>		
Green Slips	1.89	Zurich Insurance	Amalgamated into Insurance cost item and inflated by 'Insurance Services' sub group of CPI
Comprehensive Insurance	1.35	Quote from AEI Insurance Brokers	Amalgamated into Insurance cost item and inflated by 'Insurance Services' sub group of CPI
Registrations	0.65	Price charged by RTA	Amalgamated into 'Other' and inflated by CPI
<b>Bus Lubricants</b>	<b>11.13</b>		
Distillate	11.13	Average daily fuel price obtained from Mobil	Fueltrac report for Diesel fuel prices in non-metro areas
<b>Bus Repairs and Maintenance</b>	<b>5.75</b>		
Mercedes Major Service	4.72	Price supplied by Mercedes Benz	'Motor Vehicle Repair & Servicing' expenditure class of CPI
Tyre List Price	1.03	Price supplied by Western Tyre and Wheel p/l for a Michelin 11R22.5 XZU radial bus tyre	'Motor Vehicles Parts & Accessories' Expenditure class of CPI
<b>All other costs</b>	<b>13.57</b>	CPI	CPI
<b>Total</b>	<b>100</b>		

### 3.2 Relative weighting of the cost items in the index

Currently, each cost item in the BICI is given a weighting that is intended to correspond with its proportion of total costs. These relative weightings have not been considered since 1999, and the Tribunal has previously expressed concern that they may no longer be appropriate. To address this concern, the Tribunal intends to reassess the weightings of the BICI as part of this review to ensure that the BICI continues to reflect the cost structure of non-metropolitan private bus operators. The Tribunal intends to engage a consultant to assist with this aspect of the review and to release the consultant's report for comment.

### 3.3 Need to adjust the overall cost change in the BICI to account for productivity gains

The cost index approach compensates operators for changes in the price of their inputs. This approach maintains incentives for operators to be efficient. If they can hold the increase in their cost below the change in the input price index by producing more efficiently, profits will increase. If, by contrast, their costs increase faster than the growth of the input price index, then profits will be reduced. The important point to note here is that the index measures the price of inputs to the industry on average, not the costs of an individual operator.

However, the index approach does not capture changes in the usage of a particular input relative to the level of output (for example, greater fuel economy). In addition, it does not provide a mechanism for operators to share productivity gains with their customers. This may be unfair. The Tribunal considers that adjusting the overall cost change calculated via the BICI to account for expected growth in productivity is the best way to achieve fairness. Such an adjustment ensures that the gains from productivity growth are distributed to consumers through lower fares, as well as to operators through increased income/profits. It also replicates what might be expected to happen in a competitive market.

If the changes proposed in this report are adopted, a significant proportion of items in the new BICI will be inflated using measures that already incorporate productivity changes to some extent. For example, the Consumer Price Index incorporates economy wide productivity changes. However, the BICI measures the cost of inputs to the bus industry while productivity relates to the relationship between inputs and outputs. There is therefore a case for a further adjustment to prices to share the benefits of productivity growth in the industry between customers and operators.

For these reasons, the Tribunal considers that it is appropriate to adjust the overall cost change to account for expected gains in labour productivity. This would be consistent with the approach the Tribunal takes in the taxi industry. For example, in its 2007 review of taxi fares, the Tribunal reduced the labour cost component of the

Taxi Cost Index by 0.7 to account for expected labour productivity gains in the industry, resulting in a reduction in the Taxi Cost Index of 0.35 per cent.<sup>6</sup>

---

<sup>6</sup> IPART, *Maximum fares for taxis in NSW for 2007/08 – Recommendations to the Minister*, July 2007, p 17.

## 4 Commercial Vessel Association Cost Index

The Commercial Vessel Association Cost Index (CVACI) is currently used to calculate recommended changes in maximum fares for private ferries. The CVACI comprises five cost items. Each year a range of inflators is used to estimate the change since the previous year in each of these cost items. The weighted average of the change in these five items is then used to calculate the overall cost change for the review period that is recommended by the Tribunal.

At this stage, the Tribunal has not made any decisions on changes to the CVACI. However, it has identified a range of alternative inflators for the cost items and some changes to the definition of the cost items, which it will consider during this review. It will also consider the need for the overall cost change to be adjusted to account for expected productivity gains in the private ferry industry.

The alternative inflators were selected because they meet the Tribunal's criteria of being based on independent and verifiable data that is publicly available where possible. However, inflators must also be reasonable estimates of changes in efficient costs for operators. In addition, the Tribunal considers that there is value in using consistent inflators across the various transport industries it regulates. Therefore, where it considers that the changes in costs in the private ferry industry are likely to be similar to those in other transport industries, it has selected an alternative inflator that aligns with the inflator used in other industries.

The section below discusses the current approach to inflating each of the cost items included in the CVACI, and the alternative inflators the Tribunal is considering. The subsequent sections discuss the need to adjust the overall cost change to account for productivity gains, and the expected impact if the changes the Tribunal is considering are implemented.

### 4.1 The current and alternative approaches for inflating each cost item

The CVACI includes the following cost items:

- ▼ Insurance
- ▼ Interest
- ▼ Wages
- ▼ Fuel
- ▼ Other Costs.

Each of these cost items, the current approach to inflating the item and the alternative inflators are described below. In general, the Tribunal seeks stakeholder comment on whether the alternative inflators will reflect changes in operators' costs. It also seeks comment on some specific questions, which are listed at the end of each section below. Table 4.2 (at the end of this section) summarises possible changes to the CVACI based on this information.

#### 4.1.1 Insurance costs

The change in the insurance costs item is currently calculated using data compiled directly from private ferry operators by the Commercial Vessel Association (CVA) on the actual costs paid by operators. As for the BICI, the Tribunal is considering estimating this change by inflating the current value of the cost item by the change in the 'insurance services' sub group of the CPI.

The Tribunal seeks comment on the following question:

- 9 Is the change in the 'insurance services' sub group of the Consumer Price Index (CPI) an appropriate inflator for private ferry insurance costs?

#### 4.1.2 Interest costs

For the Tribunal's 2006 fare review, the CVA used interest rates for capital borrowing and working capital facilities from the National Australia Bank to calculate the change in the interest costs item. Currently, the magnitude of the loan required for private ferries is not measured; the interest cost is only determined using changes in the interest rate.

In other industries, the Tribunal tends to measure changes in interest rates using Commonwealth bond rates. There are two primary reasons for this. The first is that the Tribunal considers that the use of bond rates is more likely to mean that comparable data is available from year to year. Using a specific interest rate of a commercial bank could create problems should the bank change the product or cease to publish the interest rate in question. The second reason is that bond rates are collected by the Tribunal and therefore are administratively simpler than using commercial bank rates.

For these reasons, the Tribunal is considering using a Commonwealth bond rate. Because the CVACI only picks up changes in the interest rate from year to year and not the absolute value of the rate, the Tribunal's preliminary view is that moving to a Commonwealth bond rate would have little impact on the cost reflectivity of the index.

The Tribunal seeks comment on the following question:

- 10 Are there any reasons that annual changes in a Commonwealth bond rate would not reflect annual changes in interest paid by private ferry operators?

### 4.1.3 Wages

In its 2006 review the Tribunal used the change in the level of average weekly earnings (AWE) compiled by the Australian Bureau of Statistics to inflate the wages cost item.

Using the change in AWE as the inflator for this item meets the Tribunal's criteria of being an independent and publicly available measure. However, in other industries the Tribunal prefers to use the WPI rather than AWE. The primary difference between the two measures is that the WPI measures the wage and salary costs for an employer for a fixed quantity and quality of labour, so it is unaffected by compositional changes in the workforce. AWE on the other hand is affected by compositional changes in the workforce. For these reasons, the Tribunal is considering using the change in the WPI to estimate the change in the wages cost item of the CVACI.

Neither the WPI nor AWE captures changes in labour productivity. The Tribunal considers that if either were used, there would be a need to adjust the overall cost change determined by the CVACI to account for expected gains in labour productivity, in order to share the benefits of these gains with customers.

Table 4.1 summarises the key differences between the AWE and WPI indices.

**Table 4.1 Comparison of ABS labour cost indices**

	<b>WPI<sup>a</sup></b>	<b>AWE</b>
Definition	A price index designed to measure the change in wage rates for a set of constant quality jobs — measuring wage changes not wage levels.	A measure of the level of average gross (before tax) earnings of employees at a point in time — measuring the wages bill per employee.  AWE estimates total earnings.  AWE (OTE) is the same as AWE but excludes overtime payments.
Estimation methodology	Prices a fixed quantum of labour services for specific jobs in terms of wage and salary payments to employees occupying the jobs.  Excludes non-wage labour costs such as severance payments and superannuation contributions.  Analogous in its construction to the Consumer Price Index.	Obtained by dividing estimates of weekly total earnings by estimates of number of employees.  Excludes non-wage labour costs such as severance payments and superannuation contributions.
Sample selection	Collects information from businesses each quarter on price changes in selected jobs.	Collects information from businesses on their number of employees and their total gross weekly earnings for a specific pay period each quarter.
Advantages and disadvantages	Does not reflect compositional changes in the workforce such as any replacement of lower skilled (and paying) jobs with higher skilled (and paying) jobs, or other changes in the quality of labour.  Does not reflect productivity because it is not affected by changes in labour quality or quantity.  The exclusion of compositional and productivity changes makes the WPI less volatile and more useful in assessing short-term wage trends.	Affected by changes in hours worked and by compositional changes in the employee workforce.  Changes in the averages are also affected by changes in the overall composition of the wage and salary earner segment of the labour force, which makes the measure more volatile.  Reflects productivity driven by compositional changes in the workforce.

<sup>a</sup> WPI was formerly known as the Wage Cost Index.

The Tribunal seeks comment on the following question:

11 Is the annual change in the Wage Price Index (WPI) reflective of the annual change in private ferry industry wages?

#### 4.1.4 Fuel costs

Like the BICI, the CVACI currently uses fuel cost data obtained from Mobil to estimate the annual change in the fuel costs item. In this case, the data represents the change in the Mobil terminal gate price for wholesale diesel fuel from year to year, less the fuel excise, which operators are exempt from paying. In contrast, the Taxi Cost Index uses fuel cost data obtained by Fueltrac to estimate the annual change in the fuel costs item.

The Tribunal is considering whether Fueltrac data would better meet its criteria for independence and consistency. The Tribunal's preliminary view is that the relevant Fueltrac data would measure the annual change in wholesale prices for diesel in metropolitan NSW, averaged over the year. However, the Tribunal is seeking comment from industry participants on this issue.

The Tribunal seeks comment on the following question:

- 12 Is it appropriate to use Fueltrac data on wholesale diesel prices for metropolitan areas, or should the Tribunal use a weighted average of metropolitan and regional areas, to estimate the change in the fuel costs item? If the Tribunal was to use a weighted average, how should the weightings be determined?

#### 4.1.5 Other costs

The 'other costs' item in the CVACI is currently inflated by the change in the CPI.

The Tribunal's preliminary view is that the change in the CPI continue to be used as the inflator for this cost item, as it appears to meet all of the Tribunal's criteria.

The Tribunal seeks comment on the following question:

- 13 Is there any information to suggest that using the change in the Consumer Price Index (CPI) to inflate 'other' costs in CVACI will systematically over or under estimate the changes in these costs?

**Table 4.2 CVACI costs and inflators**

Item	Weight	Current Inflator	Possible New Inflator
Wages	40.3	Average Weekly Earnings	WPI
Fuel	12.0	Mobil Terminal Gate Price (net of excise)	Fueltrac data (net of excise)
Insurance	5.6	Actual Insurance costs paid by operators compiled by CVA	'Insurance Services' sub-group of the CPI
Interest	4.1	Interest Rates for capital borrowing and working capital facilities from NAB	Commonwealth Bond Rate
Other	37.9	CPI	CPI

#### 4.2 Need to adjust the overall cost change in the CVACI to account for productivity gains

As noted in Chapter 3, the cost index approach provides incentives for individual operators to hold their own cost increases below those of the industry as a whole because the index measures the price of inputs to the industry on average, not the costs of an individual operator. However, it does not capture changes in the usage of a particular input relative to the level of output (for example, greater fuel economy) and it does not provide a mechanism for operators to share productivity gains with their customers. The Tribunal considers that adjusting the overall cost change calculated via the CVACI to account for expected growth in productivity is the best way to achieve fairness. Such an adjustment ensures that the gains from productivity growth are distributed to consumers through lower fares, as well as to operators through increased income/profits. It also replicates what might be expected to happen in a competitive market.

If the changes proposed in this report are adopted, approximately 60 per cent of the total costs in the CVACI will be inflated using measures that already incorporate productivity changes to some extent. For example, the Consumer Price Index incorporates economy wide productivity changes. However, the CVACI measures the cost of inputs to the private ferry industry while productivity relates to the relationship between inputs and outputs. There is therefore a case for a further adjustment to prices to share the benefits of productivity growth in the industry between customers and operators.

For these reasons, the Tribunal considers that it is appropriate to adjust the overall cost change to account for expected gains in labour productivity. This would be consistent with the approach the Tribunal takes in the taxi industry. For example, in its 2007 review of taxi fares, the Tribunal reduced the labour cost component of the

Taxi Cost Index by 0.7 to account for expected labour productivity gains in the industry, resulting in a reduction in the Taxi Cost Index of 0.35 per cent.<sup>7</sup>

### 4.3 Expected impact of methodology changes

The Tribunal has recalculated the change in CVACI for the past two years, using the 2006 cost weightings and the alternative inflators set out in this chapter. The Tribunal's calculations show that:

- ▼ the cumulative change in the CVACI using the current inflators would have been 11.03 per cent
- ▼ the cumulative change in the CVACI using the alternative inflators would have been 11.12 per cent.

---

<sup>7</sup> IPART, *Maximum fares for taxis in NSW for 2007/08 – Recommendations to the Minister*, July 2007, p 17.

## Glossary

Commonwealth Bond Bank Bill Swap Reference Rate	Market rate, published daily in the Australian Financial Review.
CPI	Consumer Price Index. Published quarterly by the Australian Bureau of Statistics. The CPI measures quarterly changes in the price of a 'basket' of goods and services which account for a high proportion of expenditure by the CPI population group (ie, metropolitan households).
CPI - Insurance Services	Insurance services sub-group of the CPI, which is part of the Financial and insurance services group. It measures increases in the price of insurance services including comprehensive insurance for dwellings and motor vehicles, compulsory third party motor vehicle insurance services. Published quarterly by the Australian Bureau of Statistics.
CPI - Motor Vehicle Parts & Accessories	Motor Vehicles Parts & Accessories expenditure class of the CPI, which is part of the Private motoring sub-group of the Transport group. It measures increases in the price of motor vehicle parts and accessories, including motor oils and tyres. Published quarterly by the Australian Bureau of Statistics.
CPI - Motor Vehicle Repair & Servicing	Motor Vehicle Repair & Servicing expenditure class of the CPI, which is part of the Private motoring sub-group of the Transport group. It measures increases in the price of motor vehicle repair and servicing, including crash repairs, panel beating and routine servicing of motor vehicles. Published quarterly by the Australian Bureau of Statistics.
CPI - Motor Vehicles	Motor Vehicles expenditure class of the CPI, which is part of the Private motoring sub-group of the Transport group. It measures increases in the price of motor vehicles, including purchase and long term hire/lease of new cars and motor cycles. Published quarterly by the Australian Bureau of Statistics.

Fueltrac Report	<p>Report on average fuel prices provided by Fueltrac, a company which provides fuel price monitoring services. Diesel price reports available include:</p> <ul style="list-style-type: none"> <li>▼ Wholesale IPIP - monthly pricing indicator based on a fixed formula, that takes into account movements in international pricing variables, such as refined product prices, shipping, wharfage, insurance, losses and local margins</li> <li>▼ Retail Pump Price - daily assessments of retail price movements throughout Australia</li> <li>▼ Terminal Gate Price (TGP) - an actual wholesale price paid when filling a tanker</li> <li>▼ Card List Price - price paid by fuel card account holders, a bulk purchase price.</li> </ul>
WPI	<p>Wage Price Index. It measures quarterly increases in the price of wages. Four wage price indices are constructed and published quarterly by the Australian Bureau of Statistics covering:</p> <ul style="list-style-type: none"> <li>▼ ordinary time hourly rates of pay excluding bonuses</li> <li>▼ ordinary time hourly rates of pay including bonuses</li> <li>▼ total hourly rates of pay excluding bonuses</li> <li>▼ total hourly rates of pay including bonuses.</li> </ul> <p>Note that 'bonuses' refers to bonuses and commissions.</p> <p>In the Taxi Cost Index the Tribunal uses the third measure, total hourly rates excluding bonuses.</p>

