Australian Government
Department of Transport and Regional Services
Bureau of Transport and Regional Economics

avline

issue 4 May 2004

avline issue 4 May 2004

from the director

Welcome to the fourth edition of *Avline*.

As forshadowed in *Avline* 3, this issue of *Avline* opens with a feature article on the development of Australian domestic airline on time performance information and the reporting of on time performance statistics from November 2003 to February 2004.

Dr Judith Winternitz
Acting Executive Director

AT A GLANCE

internet addresses

Download this issue of *Avline* and back issues:
http://www.btre.gov.au/avline.htm

Bureau of Transport and Regional Economics
home page:
http://www.btre.gov.au

AUSTRALIAN DOMESTIC AIRLINE ON TIME PERFORMANCE

Introduction

The Bureau last explored the question of the quality of airline services in its 1992 study, *Quality of service in Australian passenger aviation (Report 80)*. The report looked at a number of measures of the quality of service provided to passengers, including on time performance, noting that while the concepts are easily understood, they are not easily measured.

In late 2003, the Bureau reached agreement with major Australian domestic carriers—Qantas, Virgin Blue, Regional Express and Skywest—on the publication of on time performance information for the first time. As a result of this agreement, on time performance data for the period November 2003 to January 2004 was made available on the BTRE website on 8 March 2004. On time performance data is now updated monthly on the BTRE website at www.btre.gov.au/avstats/index.htm, and will be a regular feature in future editions of Avline.

From the consumer's perspective, flight delays are a major cause for complaint in the airline industry. By collecting and publishing on time performance data, the BTRE provides the travelling public and the aviation industry with information to compare performance and make informed decisions when planning air travel. The BTRE on time performance data collection mirrors international on time performance reporting which has long been available for US and European routes.

The Data

On time performance is reported by Qantas, Virgin Blue, Regional Express and Skywest for all routes flown by two or more airlines where the aggregate passenger load (total of travel in both directions) averages over 8,000 passengers per calendar month.

In February 2004 there were 40 Australian city pair routes that met this definition, including major trunk routes linking all the state and territory capitals and major regional centres, such as Albury, Alice Springs, Broome, Burnie, Cairns, Coffs Harbour, Devonport, Dubbo, Gold Coast, Kalgoorlie, Launceston, Mackay, Maroochydore, Mildura, Proserpine, Rockhampton, Townsville and Wagga Wagga.

Detailed on time data is provided for each city pair, and is also available for each airport, in terms of the 40 competitive routes, at the BTRE website, www.btre.gov.au. Table 1 shows total airline network performance data, and represents over 95 per cent of scheduled aviation services in Australia. The number of routes covered by the BTRE collection can be expected to vary over time as airline operators and traffic levels vary.

TABLE 1 DOMESTIC AIRLINE ON TIME PERFORMANCE—TOTALS ALL COMPETITIVE ROUTES

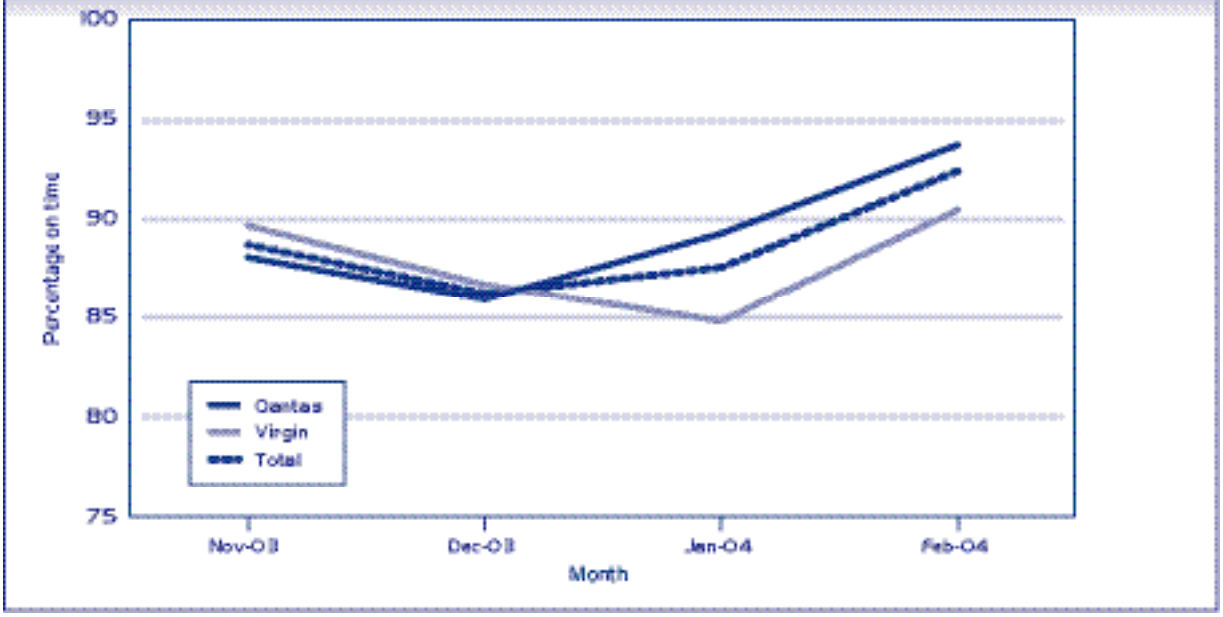
Airline[a]	Month	Sectors Flown	Departures On Time (%)	Arrivals On Time (%)
Qantas	Nov-03	9 823	86.4%	88.4%
	Dec-03	10 273	83.9%	86.6%
	Jan-04	10 147	87.3%	89.5%
	Feb-04	9 433	92.4%	93.2%
QantasLink	Nov-03	10 469	87.8%	86.9%
	Dec-03	10 262	84.8%	83.2%
	Jan-04	9 884	88.6%	86.3%
	Feb-04	9 974	89.3%	87.0%
Regional Express	Nov-03	4 229	86.7%	87.8%
	Dec-03	4 634	83.4%	84.0%
	Jan-04	3 789	86.2%	84.6%
	Feb-04	4 317	85.3%	84.5%
Skywest	Nov-03	712	96.5%	96.5%
	Dec-03	690	97.0%	97.0%
	Jan-04	660	95.0%	95.2%
	Feb-04	623	94.5%	94.4%
Virgin Blue	Nov-03	7 108	90.1%	88.7%
	Dec-03	7 311	86.4%	85.3%
	Jan-04	7 205	84.4%	83.8%
	Feb-04	6 659	90.7%	89.8%
All Airlines[b]	Nov-03	32 341	87.9%	88.1%
	Dec-03	33 170	84.9%	85.1%
	Jan-04	31 685	87.1%	86.7%
	Feb-04	31 006	90.1%	89.3%

a Major domestic airlines only, curently represent over 95% of scheduled aviation services in Australia.
b Total of the major domestic airlines.
Source BTRE Statistics Section, airline on time performance statisitcs.

Avline 4 May 2004

At present, the top five domestic airline routes account for around 21 per cent of the total sectors flown on regular public transport air services in Australia and approximately 42 per cent of the total passenger traffic. Figure 1 provides aggregate on time performance data for the top five routes. Both Qantas and Virgin Blue experienced a fall in on time performance over the summer holiday period, but recovered strongly in February, with 90.1 per cent of departures and 89.3 per cent of arrivals being on time.

FIGURE 1 DOMESTIC AIRLINE ON TIME PERFORMANCE—AGGREGATE OF TOP 5 ROUTES



Source *BTRE Statistics Section.*

These Australian results compare very favourably with overseas experience. In the United States, 77.5 per cent of domestic arrivals were on time in February 2004, while the average for the year ended February 2004 was 81.3 per cent. The Association of European Airlines provides on time performance information based on the total short/medium haul services within Europe, cross border and domestic, to North Africa and the Middle East (results of member airlines only). On time departures for February 2004 were 80.5 per cent, while on time arrivals were 78.8 per cent.

On time performance definitions

From a traveller's perspective, on time performance is generally measured against the relevant aircraft departure and arrival times listed in the airline's computerised reservation system (or online flight schedule) at the time a booking is made.

However, when does, for example, 'departure' occur—when the passenger boards the aircraft, when the aircraft leaves the terminal (chocks away) or when the aircraft lifts off the runway? There can be a significant time differences between the first and last events.

Consistent with US and European on time reporting definitions, flights departing from or arriving at the airline terminal building **within 15 minutes of the scheduled times** are considered to be on time. This is because delays of this magnitude in departure time can frequently be 'made up' by the aircraft in flight, or in the case of arrival times, readily accommodated in the passenger's arrangements with minimal inconvenience.

Delays can occur for a variety of reasons, such as weather conditions, airport congestion, airspace congestion, equipment failures, unscheduled aircraft maintenance, crew shortages and industrial action. Operating circumstances, both within and outside the airlines' control, also vary from route to route and according to the type of service being offered.

Measurement issues arise when considering almost every aspect of on time performance: what is a 'scheduled' service when schedules are developed many months in advance? what is the difference between a rescheduled flight and a cancelled one? should delays due to weather be treated the same as delays caused by operational requirements? what should be reported– arrivals, departures or both? There is not yet international agreement or definitive guidance on these questions.

Avline 4 May 2004

Under the agreement reached between the BTRE and the Australian domestic carriers, both arrivals and departures are reported. Flights cancelled or rescheduled more than seven days prior to the original departure time are not counted as cancellations or delays for on time performance purposes, however, data on flights cancelled with 7 days of scheduled departure time are included as cancellations in the reports.

It should be noted that the method of capturing on time performance data can vary between airline operators and aircraft types. Traditionally, all arrival and departure times have been recorded from information provided by air and ground crews. This is still the most common means of recording. Electronic systems that automatically record when doors open and close, brakes are released or engaged, weight on or off the wheels and landing gear changes are becoming more common, but it will be some time before this type of electronic sensor equipment is standard in new aircraft.

Qantas jet aircraft are fitted with the Aircraft Communication Addressing and Reporting System (known as ACARS) which electronically records departure and arrival times. QantasLink non-jet aircraft, Virgin Blue, Regional Express and Skywest aircraft fleets currently record departure and arrival times using information sourced from pilots, gate agents and/or ground crews.

It is important to note that on time performance is only one measure of airline service quality. Other factors, such as flight frequency, non-stop service, in-flight comfort and service, airport services and facilities and brand loyalty are also important in determining travellers' flight choices. In addition, it is crucial that safety considerations remain central to airline operations, and the Australian Government views safety as more important than avoidance of delays for the travelling public.

Improvements in on time performance and other service areas are not only seen as consumer quality issues - they can reduce costs for airlines. It is reported that delays can cost up to 3 per cent of operating revenue. Punctuality is understood to be one of the key performance indicators in the airline industry and an important service differentiator, especially for the higher-yield business customers. The BTRE's independent on time performance reporting is a valuable addition to the overall airline monitoring and reporting regime in Australia.

STATE OF PLAY IN AUSTRALIAN AVIATION

Avline 4 May 2004

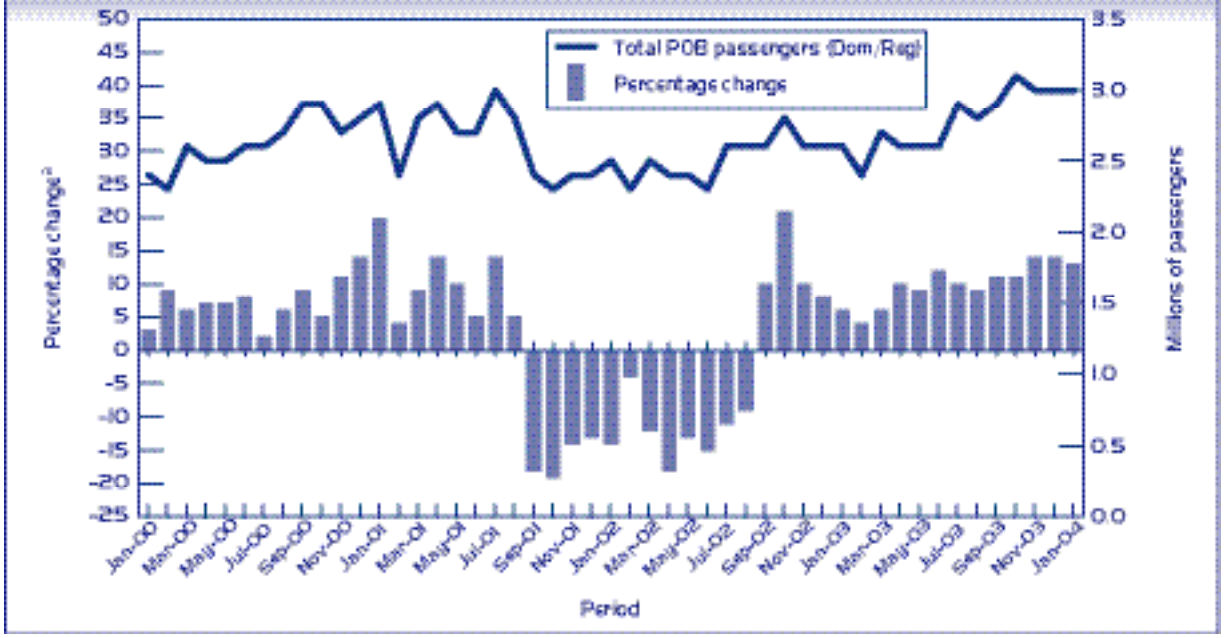
Key dates impacting on data

Since June 2000 a number of significant events have impacted on Australia's aviation industry. They are listed on page 12 of this issue and should be taken into account when interpreting the tables and figures presented throughout the document.

Domestic and regional passengers

The total number of domestic and regional passengers continued to increase and since October 2003, have exceeded the levels being experienced prior to the Ansett collapse in September 2001 (see figure 2). Total passengers carried in the month of January 2004 saw an increase of 12.8 per cent over January 2003. In October 2003 a record 3.11 million passengers were carried, 5.6 per cent higher than the pre-Ansett collapse record month of 2.95 million passengers achieved in July 2001.

FIGURE 2 TOTAL DOMESTIC AND REGIONAL PASSENGERS



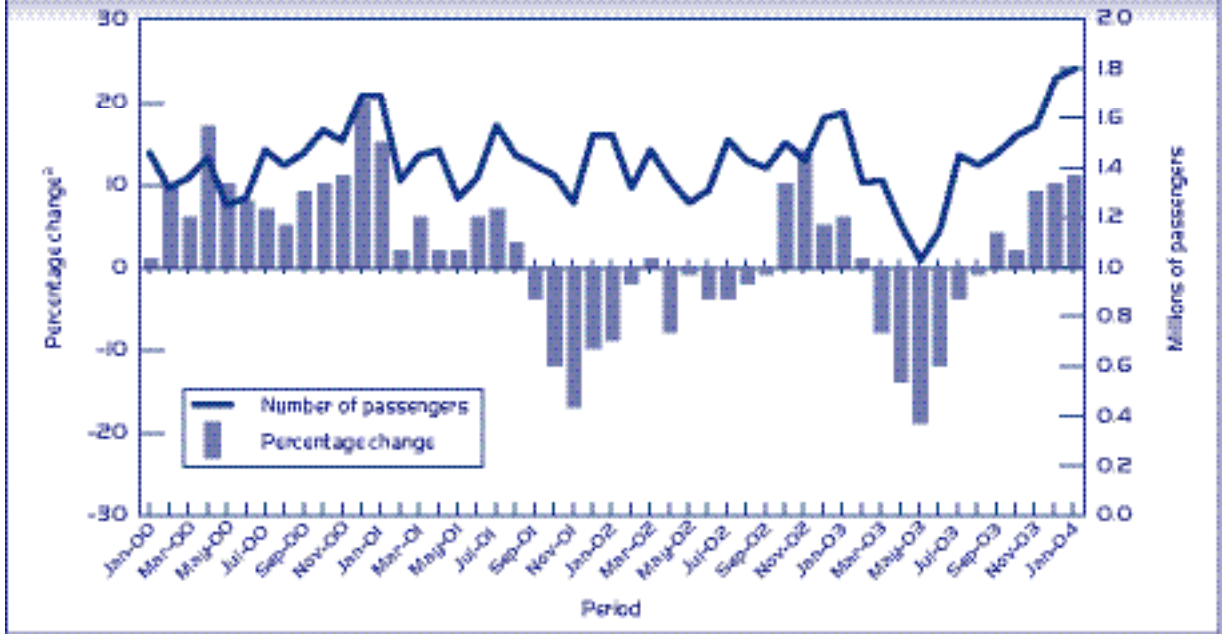
a. Growth rates are calculated over the same month in the previous year.
Note Regional data component includes BTRE estimates.
Source BTRE Statistics Section.

International passengers

The significant decline experienced during the first half of 2003 in response to the war in Iraq and the Severe Acute Respiratory Syndrome (SARS) crisis steadily improved from July 2003, with a record 1.80 million passengers being carried in January 2004, up 10.8 per cent compared with January 2003 (figure 3). At the height of the SARS outbreak in May 2003, passenger numbers were down almost 19 per cent on the previous year.

Overall, the number of international passengers for January 2004 was 175,000 above January 2003 and some 39,000 more than the previous record set in December 2003.

FIGURE 3 INTERNATIONAL PASSENGERS



a. Growth rates are calculated over the same month in the previous year.
Source ABS catalogue 3401.0, overseas arrivals and departures, Australia.

Avline 4 May 2004

TABLE 2 ACTIVITY AT MAJOR AUSTRALIAN AIRPORTS

		International[1]		Domestic[2]		Regional[2p]		Total RPT[4]		All aircraft movements including military and unscheduled[3]
Airport	Half year	Passenger arrivals and departures (millions)	RPT aircraft movements (thousands)	Passenger arrivals and departures (millions)	RPT aircraft movements (thousands)	Passenger arrivals and departures (millions)	RPT aircraft movements (thousands)	Passenger arrivals and departures (millions)	RPT aircraft movements (thousands)	(thousands)
Sydney	Jan–Jun 2002	3.9	22.8	6.5	45.9	0.8	37.2	11.1	105.8	121.7
	Jul–Dec 2002	4.1	23.7	7.2	54.8	0.8	37.3	12.1	115.7	130.8
	Jan–Jun 2003	3.7	23.4	7.0	51.4	0.7	34.8	11.4	109.6	123.7
	Jul–Dec 2003	4.3	25.6	8.0	55.6	0.8	37.3	13.1	118.5	134.5
Melbourne	Jan–Jun 2002	1.6	10.7	6.0	45.7	0.3	13.3	7.9	69.7	75.1
	Jul–Dec 2002	1.7	10.8	6.4	50.2	0.3	13.9	8.3	74.9	80.5
	Jan–Jun 2003	1.5	10.2	6.4	49.2	0.3	12.5	8.1	71.9	77.3
	Jul–Dec 2003	1.7	11.1	7.2	52.2	0.3	12.5	9.2	75.9	81.3
Brisbane	Jan–Jun 2002	1.2	8.3	4.0	35.1	0.4	15.7	5.6	59.2	71.5
	Jul–Dec 2002	1.3	9.1	4.4	38.0	0.4	13.6	6.1	60.7	74.3
	Jan–Jun 2003	1.1	8.1	4.4	37.4	0.3	10.4	5.7	55.9	67.5
	Jul–Dec 2003	1.4	8.6	5.2	40.0	0.3	11.4	6.9	60.1	72.3
Perth	Jan–Jun 2002	0.8	4.1	1.5	13.7	0.1	3.8	2.4	21.6	44.5
	Jul–Dec 2002	0.9	4.3	1.7	15.1	0.1	4.2	2.6	23.6	47.4
	Jan–Jun 2003	0.7	4.2	1.7	15.9	0.1	4.2	2.6	24.3	46.3
	Jul–Dec 2003	0.9	4.6	1.9	16.4	0.1	4.2	2.9	25.3	47.6
Adelaide	Jan–Jun 2002	0.1	0.8	1.8	16.4	0.1	14.6	2.0	31.8	51.3
	Jul–Dec 2002	0.1	0.9	1.9	18.8	0.2	14.8	2.2	34.4	52.2
	Jan–Jun 2003	0.1	0.8	1.9	17.2	0.2	13.8	2.2	31.8	49.3
	Jul–Dec 2003	0.1	1.0	2.2	18.2	0.2	14.3	2.4	33.5	52.1

p Provisional, regional data component includes BTRE estimates, subject to change.
1. International passenger data are the total passengers uplifted and discharged within a flight.
2. Domestic and regional passenger data are the total passengers on board (POB) by flight stage.
3. Arrival data recorded during the hours in which Airservices Australia provides a tower service.
4. RPT—Regular Public Transport.

Sources BTRE Statistics Section; Airservices Australia monthly aircraft movements at Australian reports (http://wwwairservicesaustralia.com).

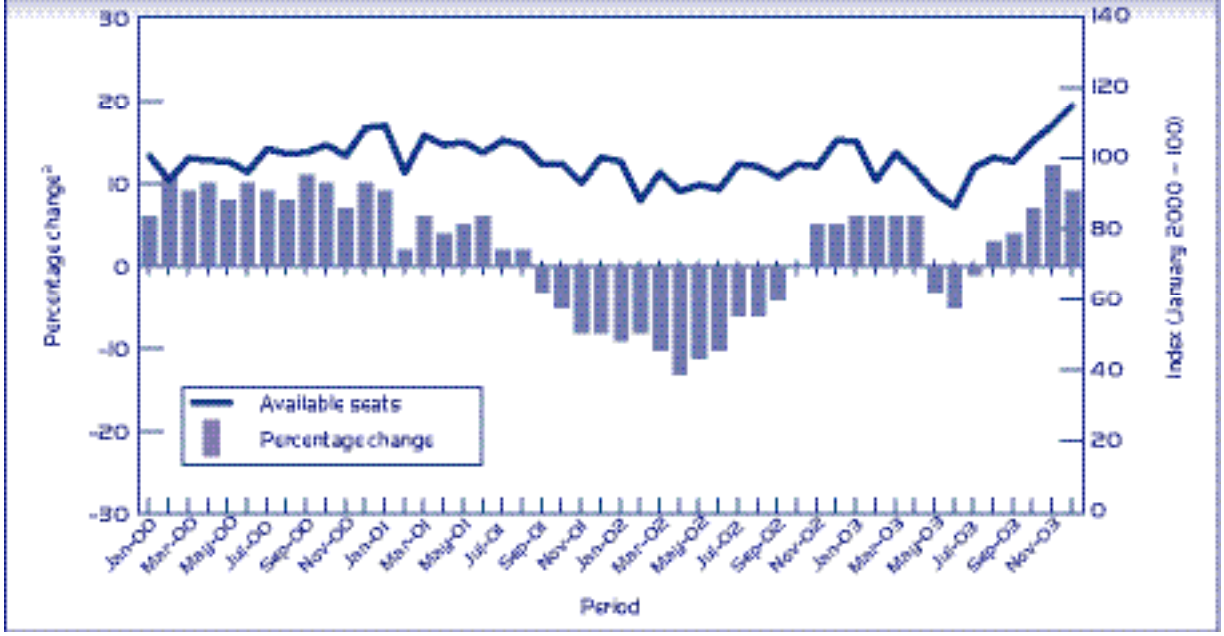
Airport activity levels

Passenger and aircraft movements for the five major Australian airports are summarised in Table 2. Total RPT passenger movements increased strongly at all major airports in the second half of 2003 in comparison to the second half of 2002, with an increase of 8.4 per cent at Sydney, 10.1 per cent at Melbourne, 13.3 per cent at Brisbane, 11.0 per cent at Perth and Adelaide.

International passenger arrivals and departures increased at all five airports in the July–December 2003 half year compared to the preceding two periods except for the 279 passenger decline at Adelaide in comparison to 2002.

The combined Domestic/Regional passenger market also continued to perform strongly at all major airports in the July–December 2003 period, particularly Perth (up 15.6 per cent from July–December 2002). Passenger numbers also increased at Sydney (10.6 per cent), Melbourne (11.7 per cent), Brisbane (14.8 per cent) and Adelaide (11.6 per cent).

FIGURE 4 INTERNATIONAL CAPACITY (INBOUND AVAILABLE SEATS), MONTHLY INDEX



a. Growth rates are calculated over the same month in the previous year.
Source: BTRE Statistics Section.

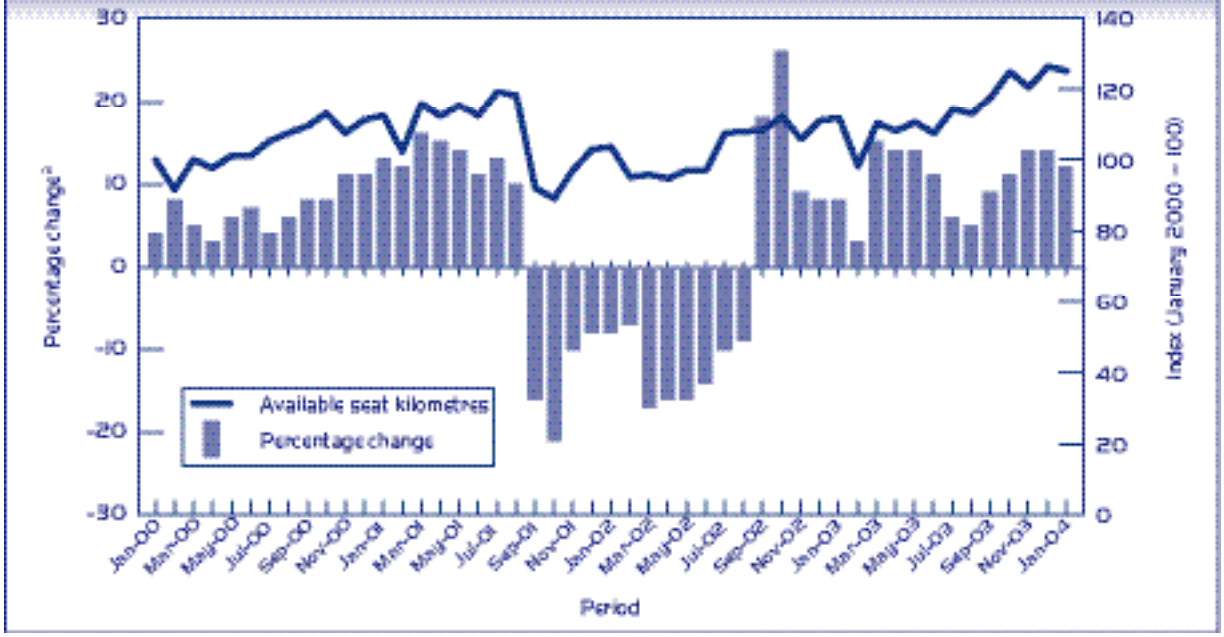
Avline 4 May 2004

Capacity and flight frequency

This issue introduces data on international airline capacity, measured in terms of inbound available seats (figure 4). During 2002, international airline capacity increased steadily, peaking at 1.04 million seats during the holiday season in December 2002–January 2003. The impact of the SARS crisis was most evident in June 2003 when international inbound capacity fell to 860,000 seats. International capacity has since recovered strongly in the second half of 2003, reaching a record 1.14 million seats in December 2003, up 9.5 per cent on December 2002.

Data for December 2003 indicates that total regional and domestic capacity, measured in available seat kilometres (ASKs), was a record 4.26 billion ASKs, an increase of 13.9 per cent from December 2002 (figure 5). This is 6.0 per cent higher than the pre-Ansett collapse record achieved in July 2001.

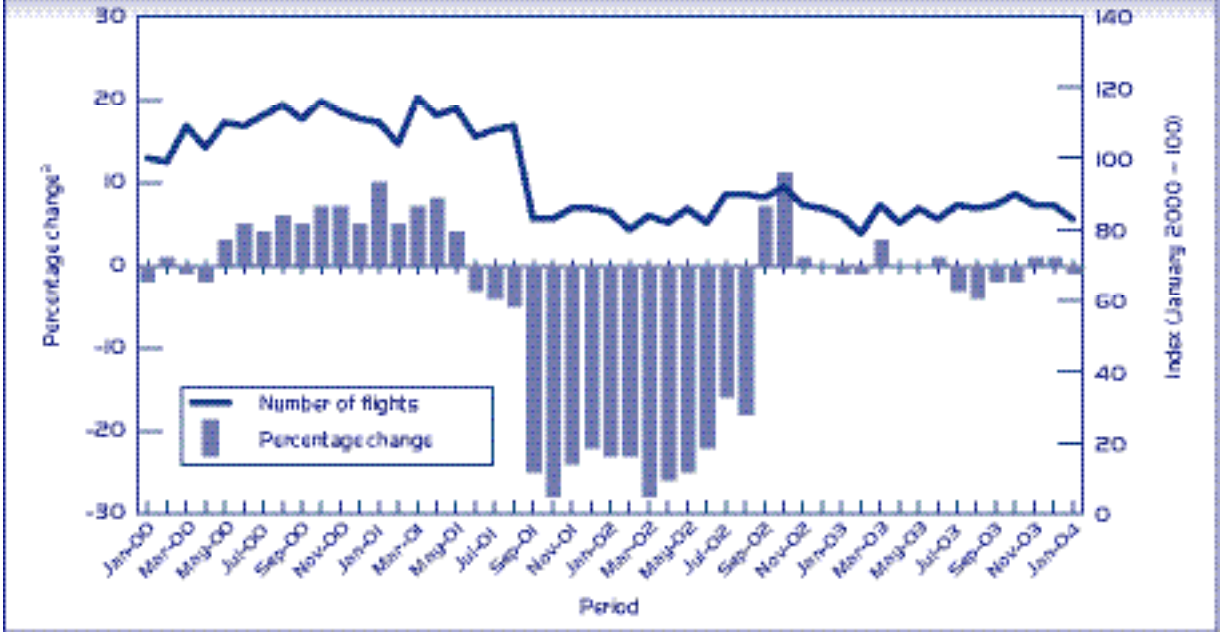
FIGURE 5 TOTAL DOMESTIC AND REGIONAL CAPACITY (AVAILABLE SEAT KILOMETRES), MONTHLY INDEX



a. Growth rates are calculated over the same month in the previous year.
Note Regional data component includes BTRE estimates.
Source BTRE Statistics Section.

Flight frequency data for January 2004 indicates that the number of domestic and regional flights was down 1.2 per cent from January 2003 (figure 6). The 38.5 thousand flight stages operated in January 2004 were 23.9 per cent below the 50.6 thousand operated in August 2001, immediately prior to the Ansett collapse.

FIGURE 6 TOTAL DOMESTIC AND REGIONAL FLIGHTS, MONTHLY INDEX



a. Growth rates are calculated over the same month in the previous year.
Note Regional data component includes BTRE estimates.
Source BTRE Statistics Section.

Avline 4 May 2004

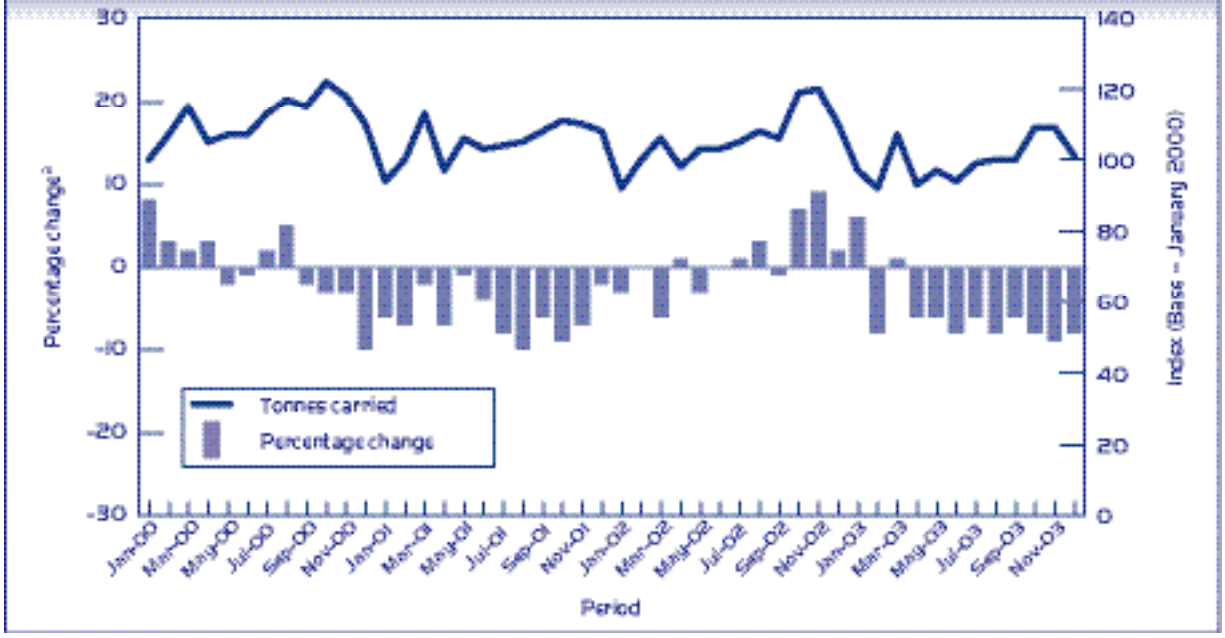
The increases from the second half of 2002 are primarily driven by the growth in the domestic airline sector as both Virgin Blue and Qantas add new aircraft to their fleets. In particular, Virgin Blue's fleet has grown from 22 aircraft in June 2002 to 40 registered aircraft in January 2004.

Air freight

The domestic air freight index has been discontinued due to concerns with data provision and coverage, as the only available data referred to air freight on scheduled passenger services, now a very small part of the domestic air freight task.

International air freight tonnes carried to/from Australia on scheduled services for December 2003 was 51,329 tonnes (27,583 inbound and 23,746 outbound). This was 8.1 per cent lower than the December 2002 total (figure 7). Total international air freight for the year to December 2003 was 609.5 kilotonnes, down 5.6 per cent on the year to December 2002 (645.9 kilotonnes).

FIGURE 7 INTERNATIONAL AIR FREIGHT TONNAGES CARRIED ON SCHEDULED SERVICES, MONTHLY INDEX



a. Growth rates are calculated over the same month in the previous year.
Source BTRE Statistics Section.

Domestic air fares

The domestic air fares indices have been expanded from this issue to include those taxes and charges that are collected as part of the airfare (security and certain airport charges inclusive of GST), commencing from March 2003. The indices, based on the lowest business, economy and best discount air fares available through the Sabre Pacific Computer Reservation System, provide a measure of changes to air fares over time. All air fares are inclusive of GST.

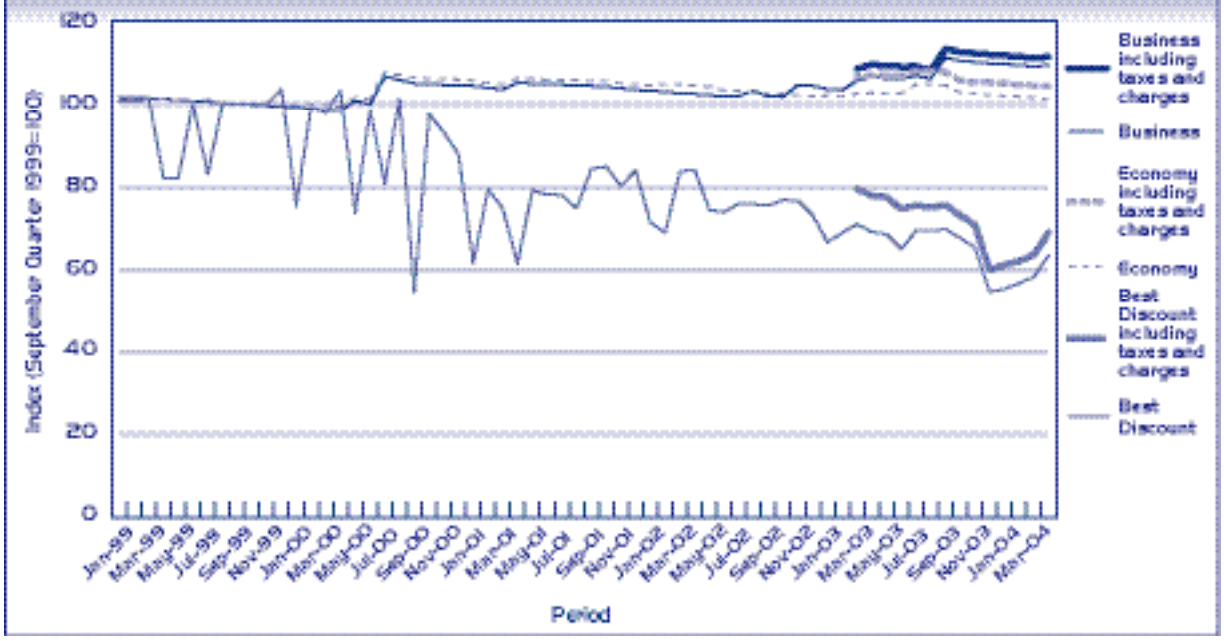
The real best discount fares index, including taxes and charges, was 11 per cent lower in April 2004 than in April 2003 (figure 8), and 31 per cent lower than in the September quarter 1999. The level of discounting in April 2004 was 9 points higher (at 69 per cent) than during the holiday period in December 2003 (a low of 60 per cent).

The April 2004 real best discount fares index, excluding taxes and charges, was also 9 points higher than in December 2003, the lowest level recorded at 55 per cent.

The real economy and business fare indices have continued to diverge since November 2002. The real economy fares index, including taxes and charges, is now 2 per cent below the April 2003 levels, and the real business fares index, including taxes and charges, is now 2 per cent higher than the April 2003 levels. Prior to November 2002 the business fare index was consistently marginally below the economy fare index.

Avline 4 May 2004

FIGURE 8 REAL DOMESTIC AIRFARES, MONTHLY INDEX

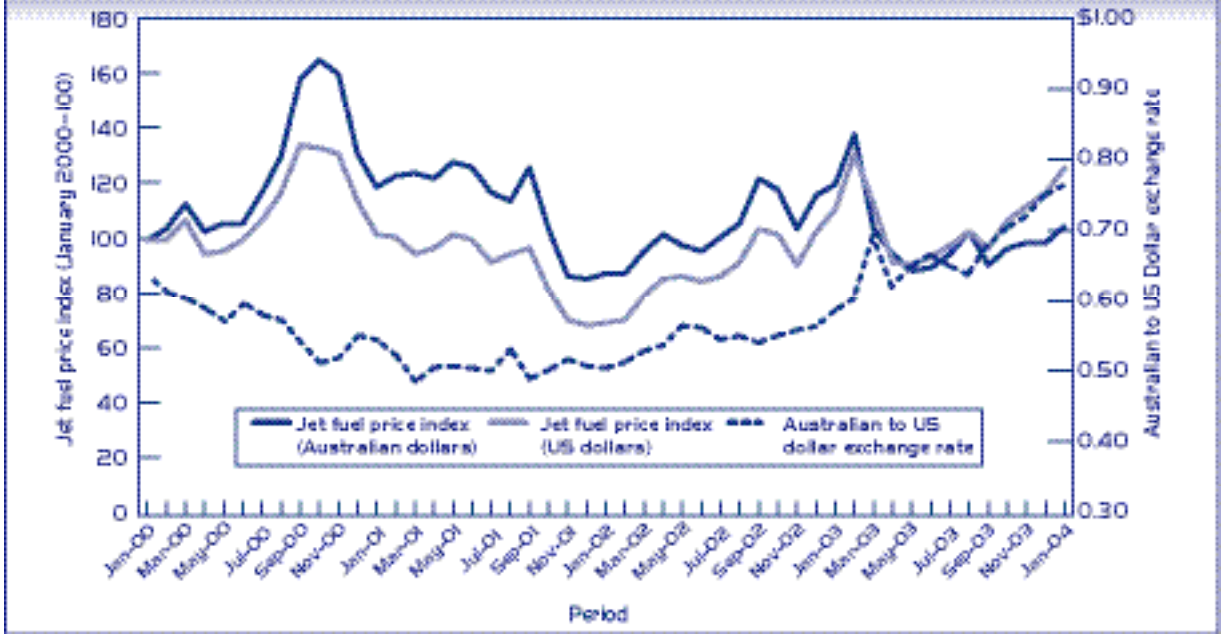


Sources *BTRE Statistics Section; SABRE Computer Reservation System (disclaimer applies).*

Jet fuel price index

Aviation jet fuel costs in Australian dollar terms were 12.5 per cent lower in January 2004 than in January 2003 (figure 9) due mainly to the improved performance of the Australian dollar against the US dollar over this period. To highlight this, in US dollar terms, the aviation fuel price index was 13.3 per cent higher than January 2003 than in January 2004.

FIGURE 9 WORLD AVERAGE JET FUEL PRICE, MONTHLY INDEX AND AUSTRALIAN TO US DOLLAR EXCHANGE RATE



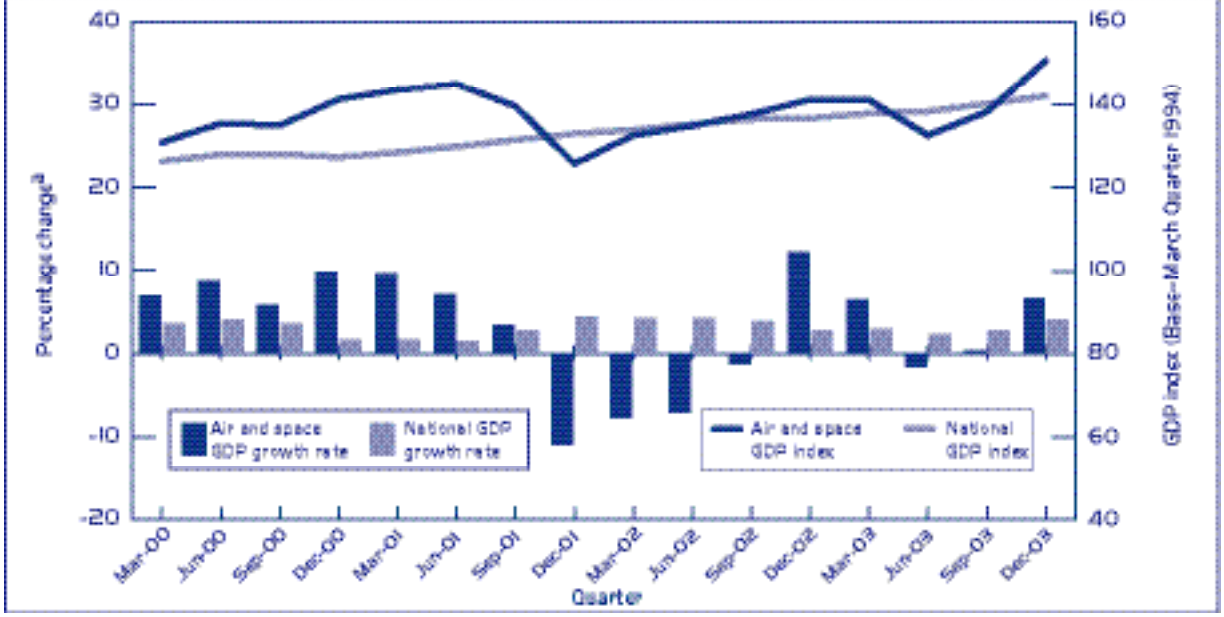
Sources *BTRE analysis using ICIS-LOR fuel prices (cited in Airline Business); Reserve Bank of Australia Bulletin, Statistical Table F11.*

Avline 4 May 2004

Economic activity

GDP for the air and space industries for the December quarter 2003 was 6.7 per cent higher than the previous December quarter 2002, and 9 per cent higher than the preceding September quarter 2003. This compares with a 4.0 per cent increase in the all industries GDP between the December quarter 2002 and the December quarter 2003 and a 1.4 per cent increase over the September quarter 2003 (figure 10).

FIGURE 10 REAL GDP CHANGES FOR AIR AND SPACE INDUSTRY AND NATIONAL GDP, SEASONALLY ADJUSTED, AUSTRALIA

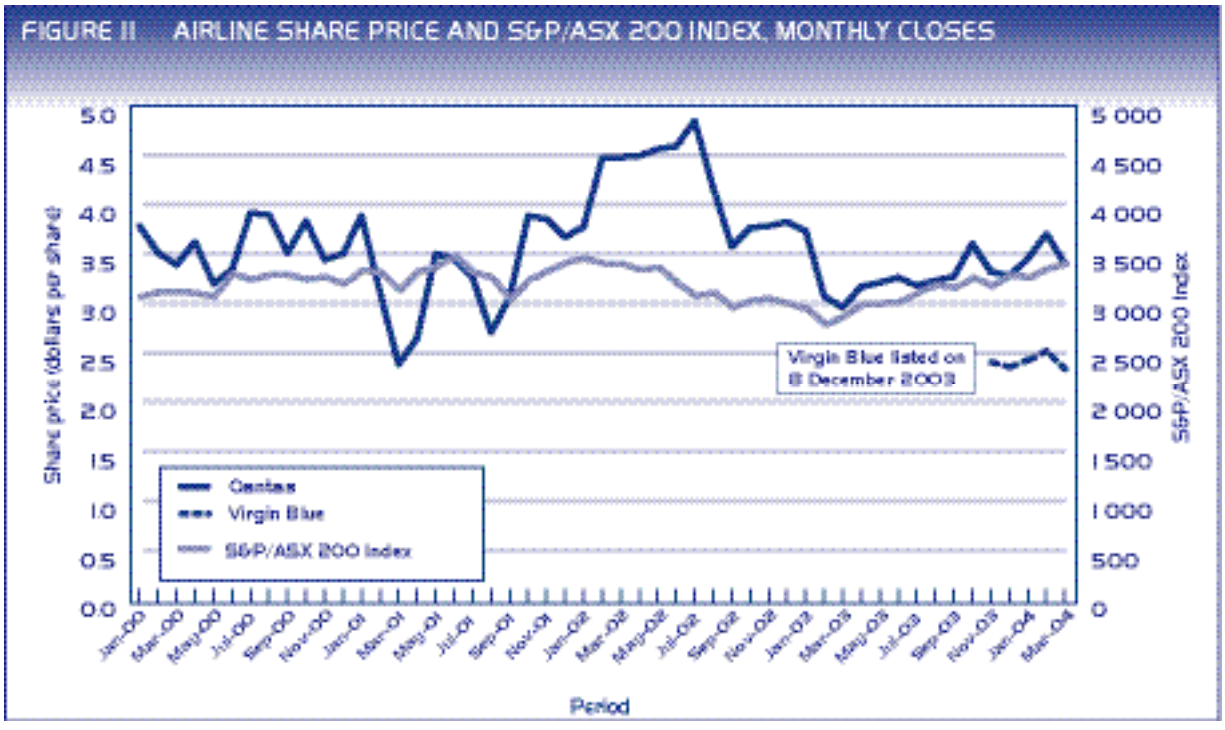


a. Growth rates are calculated over the same quarter in the previous year.
Note: Chain volume measures reference year is 2001–02. Seasonally adjusted.
Source ABS Catalogue No. 5206.0.

Airline share prices

Following the successful initial public offer and listing of Virgin Blue Airlines on the Australian Stock Exchange on 8 December 2003, Avline will report on the share price movements for both Qantas and Virgin Blue. Figure 11 shows the end of month closing price for Qantas, Virgin Blue and the ASX/S&P AS200 Index.

FIGURE 11 AIRLINE SHARE PRICE AND S&P/ASX 200 INDEX, MONTHLY CLOSES



Sources: Share prices: GS JB Were, ASX.

Avline 4 May 2004

The final price for Virgin Blue's initial public offer price was $2.25 per share, giving the airline a market capitalisation of $2.3 billion. Speculation prior to public listing on 8 December tipped a share price rise of around 6 per cent, however, stock opened at $2.40, reached a high of $2.49 and closed at $2.43 per share at the end of the first day of trading – an increase of 8 per cent. In the subsequent three months of trading, Virgin Blue's share price has remained relatively stable, peaking at $2.54 per share at the end of February 2004, and closing at $2.36 at the end of March 2004, marginally below the December closing price of $2.38 per share.

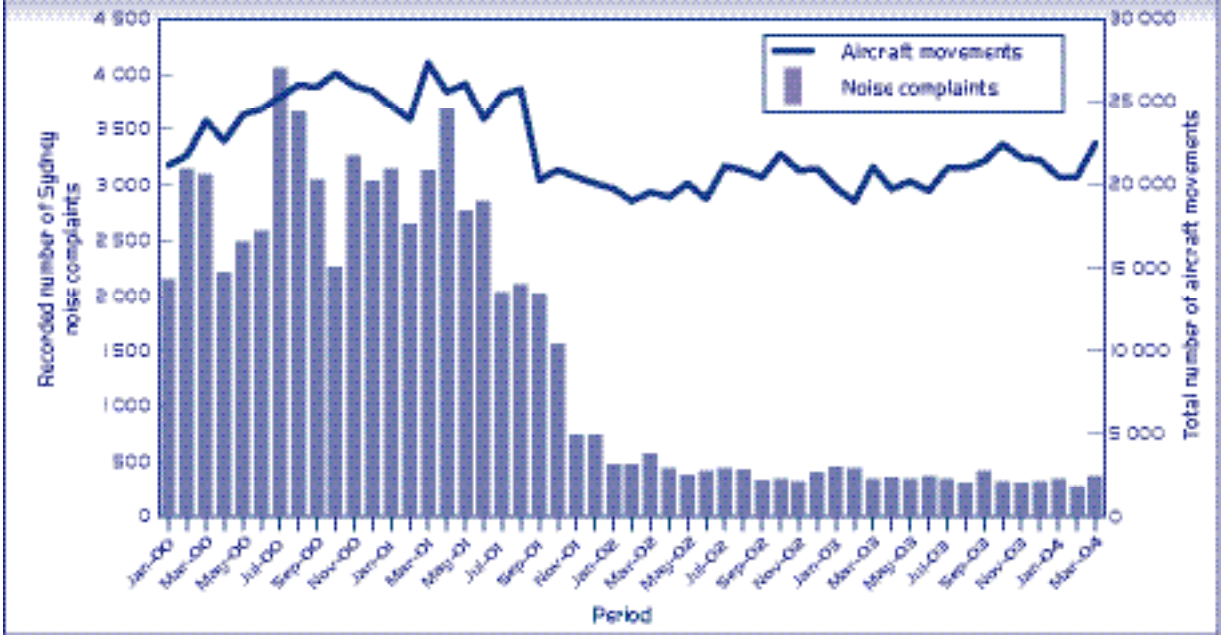
The Qantas share price closed at $3.41 at the end of March 2004, up 3.6 per cent on the December 2003 closing price of $3.29, and up 15 per cent on the $2.97 closing price at the end of March 2003.

Qantas reported a pre tax profit of $530 million for the half year to 31 December 2003. This was a 3.3 per cent increase on the December 2002 half year pre tax profit of $513 million. The $358 million after tax profit in 2003 was up 1.5 per cent on the after tax $352 million in the half year to December 2002. Qantas reported that the December 2003 quarter revenue recovered well from the effects of the SARS outbreak and the war in Iraq.

Sydney aircraft noise

Total Sydney aircraft noise complaints for March 2004 were 5.5 per cent above the level recorded for March 2003, while total Sydney aircraft movements increased 6.6 per cent compared with March 2003 (figure 12). In the year ended March 2004 there were 4,047 complaints recorded, 14.3 per cent down on the year to March 2003.

FIGURE 12 TOTAL AIRCRAFT MOVEMENTS AND THE RECORDED NUMBER OF NOISE COMPLAINTS FOR SYDNEY AIRPORT



Source: Airservices Australia, monthly Sydney Airport operational statistics (preliminary data).

Avline 4 May 2004

Definitions

Domestic Airline—an airline performing regular public transport services and whose fleet contains exclusively high capacity aircraft, defined as aircraft with more than 38 seats or with a payload of more than 4,200 kg.

Regional Airline—an airline performing regular public transport services and whose fleet contains exclusively low capacity aircraft, defined as aircraft with 38 seats or less or with a payload of 4,200 kg or less.

Note: a number of airlines still classified as 'regional' currently operate aircraft of 50 seats or more, blurring the clear line of demarcation that once existed between the domestic and regional airline sectors. This has meant that in some cases 'domestic' and 'regional' airlines service the same route.

In practice, the definition of regional airline (and the one used in this publication) has become "an airline performing regular public transport services and primarily servicing regional centres".

So as to provide a meaningful indication of the 'state of play' a number of data sets in this publication represent the combined domestic and regional airline sectors.

Airport charges data—estimates what an airline may expect to pay based on publicly available airport charges data that:

- Includes GST
- Excludes confidential agreements between airports and airlines
- Excludes terminal charges for domestic and regional services, which are often confidential and may differ by terminal and airline.

Key dates impacting on data

5 June 2000	Impulse Airlines commenced B717 operations
31 August 2000	Virgin Blue commenced operations in Australia
15 September–1 October 2000	Olympic Games, Sydney 2000
22 May 2001	Impulse Airlines merged with Qantas
11 September 2001	terrorist attacks on US
14 September 2001	Ansett Airlines placed in hands of administrator and reduced operations
5 March 2002	Ansett Airlines ceased all operations
2 August 2002	Regional Express (REX) commenced operations (merger of former Ansett subsidiaries Kendell and Hazelton Airlines)
27 October 2002	Australian Airlines commenced low cost international operations
10 February 2003	SARS outbreak first reported in China, international airline activity to/from Asia is severely affected, particularly during May 2003
20 March 2003	war with Iraq commenced
1 December 2003	Qantas announced it's new low cost domestic carrier - Jetstar, set to commence operations on 25 May 2004
8 December 2003	Virgin Blue Airlines lists on the Australian Stock Exchange
29 January 2004	Pacific Blue (international subsidiary of Virgin Blue Airlines), commenced international operations with Christchurch - Brisbane service.

Avline 4 May 2004

TABLE 3 PARAMETERS USED IN AIRPORT CHARGE CALCULATIONS

Aircraft type	Operational sector (typical)	Aircraft maximum take-off weight (tonnes)	Number of aircraft seats (nominal)	Average passenger load factor (per cent)
747-438	International	394.6	394	72.0
737-800	Domestic	79.0	158	76.5
Dash 8-300	Regional	18.6	50	60.0
SAAB340B	Regional	13.2	34	60.0
Metro 23	Regional	7.5	19	60.0

Note *The load factor is the proportion of total aircraft seats that are filled by paying passengers.*

Aircraft load factors are derived from BTRE Statistics Section data collections for the relevant operational sector and may not reflect actual load factors at specific airports.

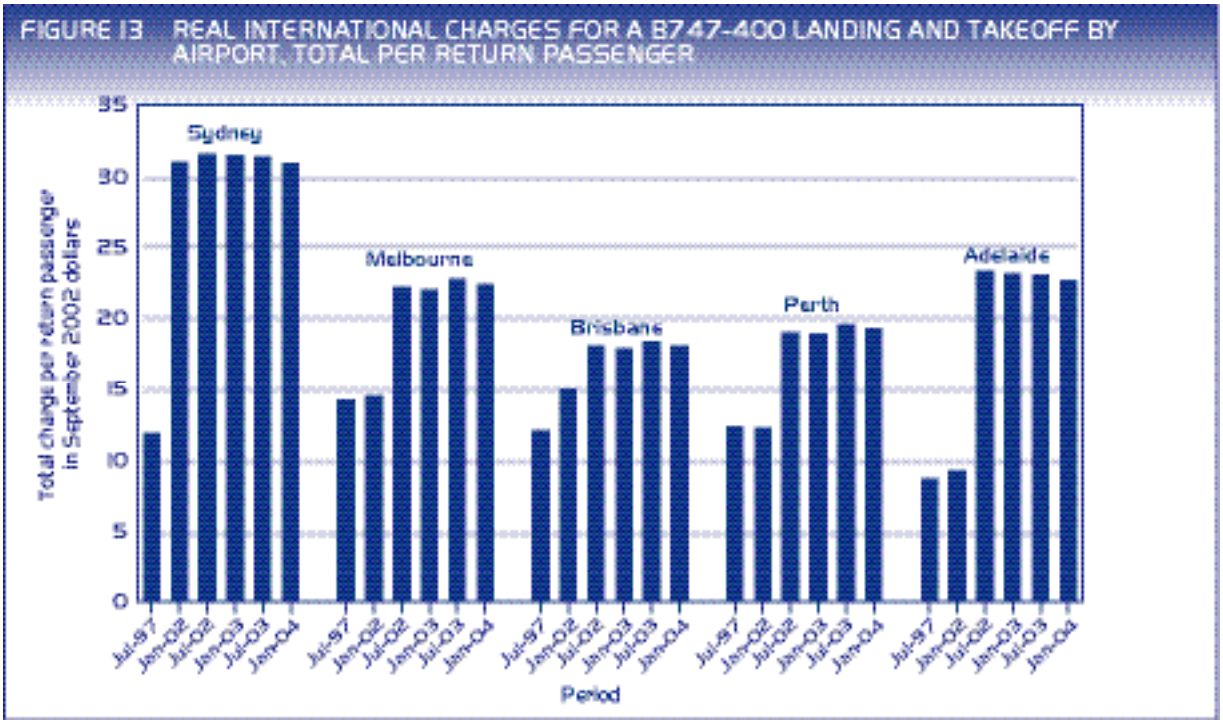
Sources *Airline websites; CASA aircraft register; BTRE aviation databases and assumptions.*

Airport Charges

Table 3 provides the parameters used by BTRE in its airport charges calculations in table 4. The load factors are Australia-wide averages derived by the BTRE. Calculated airport charges may, therefore, differ from actual charges incurred by operators at an airport.

International transit and transfer passengers at Sydney and Brisbane airports do not incur the international terminal charge. In order to exclude these passengers from the international terminal charge calculation at these airports, the BTRE has assumed that transit and transfer passengers comprise 10 per cent of international passengers.

FIGURE 13 REAL INTERNATIONAL CHARGES FOR A B747-400 LANDING AND TAKEOFF BY AIRPORT, TOTAL PER RETURN PASSENGER



Note *Charge calculations are based on BTRE assumptions and may differ from actual charges incurred by specific operators. International charge estimates include terminal charges.*
Data for periods from July 2000 are GST inclusive. Sydney charges exclude the noise charge.
An indicative international load factor of 72.0 per cent is assumed.

Sources *Published airport charge data, ABS 8 capital city CPI (6401.0); BTRE assumptions.*

Table 4 presents the estimated charges incurred by aircraft operators at Australia's major capital city airports of Sydney, Melbourne, Brisbane, Perth and Adelaide, per return passenger, for all categories of aircraft type, effective as at 31 January 2004.

Airport charges are based on the publicly available charges published by airport authorities and Airservices Australia. They should, however, be interpreted with caution as actual rates may vary for individual aircraft operators based on negotiated contracts.

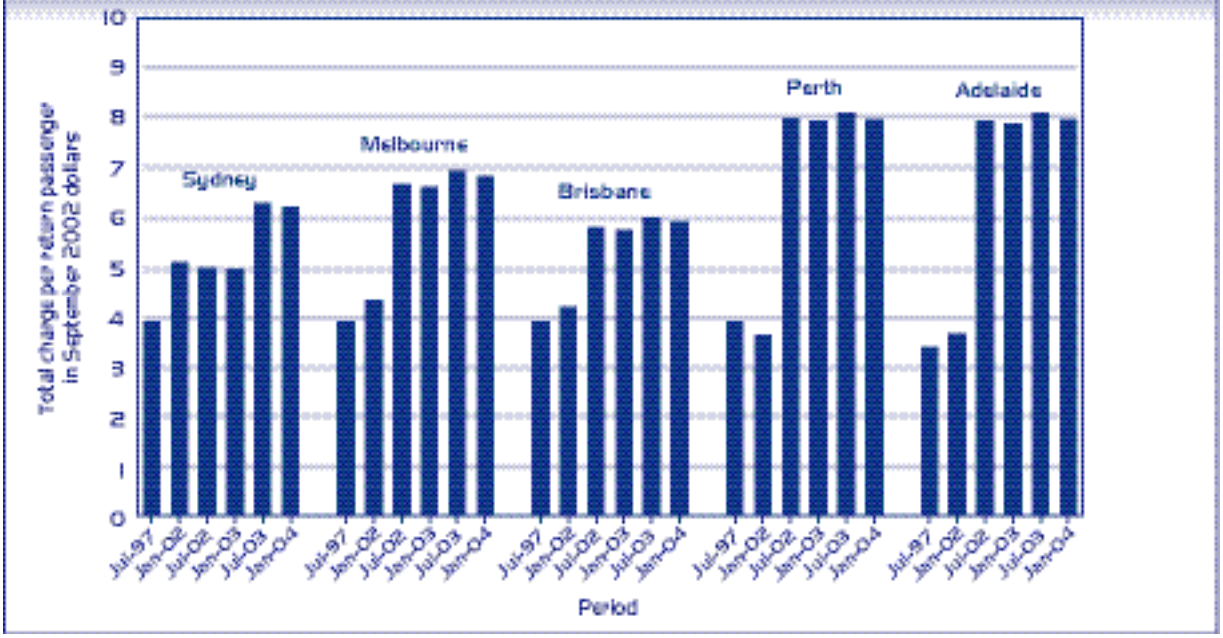
All five airports set security charges on a cost-recovery basis. If significant over (under) recovery occurs in a period, security charges are reduced (increased) in the subsequent period, which may cause period to period variation in total charges.

In summary:

- Airport charges remain unchanged at all five airports since July 2003
- Airservices charges have remained unchanged since July 2002
- Security charges were adjusted at Perth and Sydney airports

Avline 4 May 2004

FIGURE 14 REAL DOMESTIC CHARGES FOR A B737-800 LANDING AND TAKEOFF BY AIRPORT, TOTAL PER RETURN PASSENGER



Note: Charge calculations are based on BTRE assumptions and may differ from actual charges incurred by specific operators. Domestic charge estimates exclude terminal charges.
Data for periods from July 2000 are GST inclusive. Sydney charges exclude the noise charge.
An indicative domestic load factor of 76.5 per cent is assumed.

Sources Published airport charge data, ABS 8 capital city CPI (6401.0); BTRE assumptions.

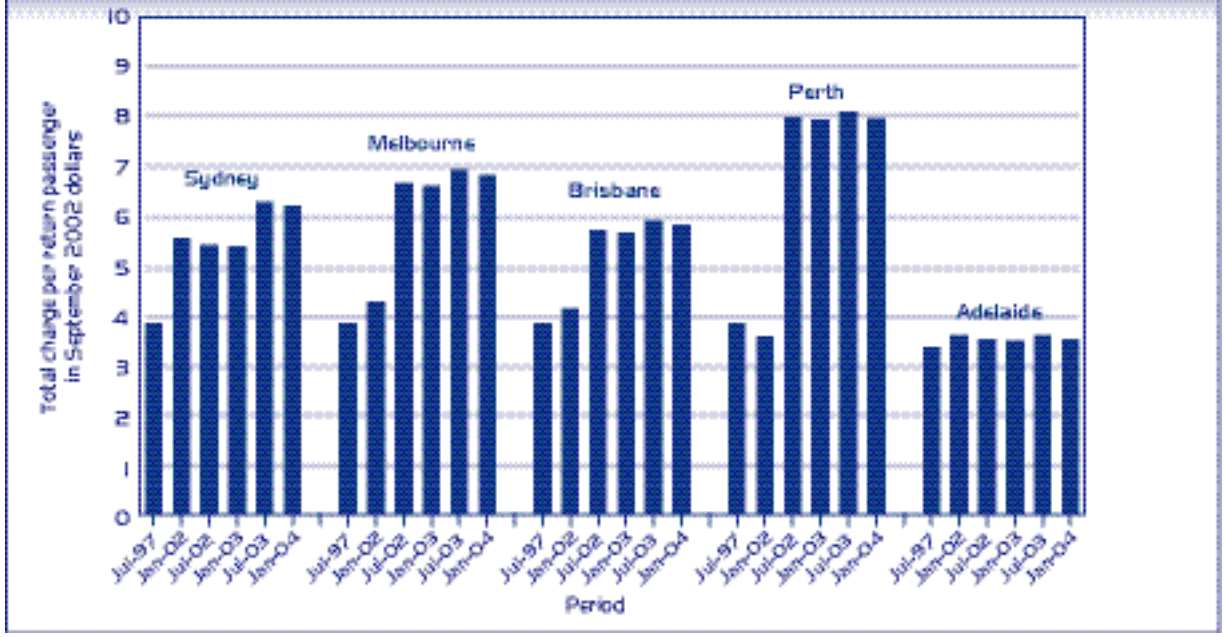
In comparison with July 2003, the January 2004 nominal five ports airport charges increased marginally for all aircraft types except for international 747-483 aircraft, which fell marginally. These variations were due to adjustments to security charges at Perth and Sydney airports.

At Sydney, security charges were adjusted with effect from 1 October 2003, resulting in a net increase of 6 per cent for international 747 services and 5 per cent for all domestic aircraft services, except for Metro 23 aircraft which remain unchanged.

At Perth, security charges were adjusted with effect from 1 January 2004, resulting in a net decrease of 2.6 per cent for international 747 services, and a net increase of 3 per cent for all domestic aircraft services.

Airport and security charges did not change at Melbourne, Perth and Adelaide airports. In real terms, landing and take-off changes fell marginally at all five airports in January 2004 compared with July 2003.

FIGURE 15 REAL DOMESTIC CHARGES FOR A SAAB 340B LANDING AND TAKEOFF BY AIRPORT, TOTAL PER RETURN PASSENGER



Note: Charge calculations are based on BTRE assumptions and may differ from actual charges incurred by specific operators. Regional charge estimates exclude terminal charges.
Data for periods from July 2000 are GST inclusive. Sydney charges exclude the noise charge.
An indicative regional load factor of 60.0 per cent is assumed.

Sources Published airport charge data, ABS 8 capital city CPI (6401.0); BTRE assumptions.

Avline 4 May 2004

TABLE 4 NOMINAL ESTIMATED CHARGES INCURRED BY AIRCRAFT OPERATORS, ALL CHARGE CATEGORIES BY AIRCRAFT, PER RETURN PASSENGER, 5 MAJOR AIRPORTS, 2002–2004

	Sydney					Melbourne					Brisbane					Perth					Adelaide					Five ports				
Aircraft type	Jan-02	Jul-02	Jan-03	Jul-03	Jan-04	Jan-02	Jul-02	Jan-03	Jul-03	Jan-04	Jan-02	Jul-02	Jan-03	Jul-03	Jan-04	Jan-02	Jul-02	Jan-03	Jul-03	Jan-04	Jan-02	Jul-02	Jan-03	Jul-03	Jan-04	Jan-02	Jul-02	Jan-03	Jul-03	Jan-04
747-438																														
Airport	30.08	31.38	31.50	31.64	31.62	14.11	22.00	22.00	22.94	22.94	14.52	17.90	17.90	18.53	18.53	11.89	18.92	18.92	19.76	19.76	8.99	23.12	23.12	23.20	23.20	15.92	22.66	22.69	23.21	23.21
Airservices	7.12	7.66	7.66	7.66	7.66	6.22	6.32	6.32	6.32	6.32	8.68	8.93	8.93	8.93	8.93	12.53	13.76	13.76	13.76	13.76	15.90	17.29	17.29	17.29	17.29	10.09	10.79	10.79	10.79	10.79
Security	6.79	6.80	6.80	6.62	7.02	4.11	2.66	3.60	3.72	3.72	5.94	5.34	5.34	5.99	5.99	4.44	4.44	4.75	4.26	3.14	6.52	5.89	5.89	6.17	6.17	5.56	5.03	5.28	5.35	5.21
Total 747-438	43.99	45.84	45.96	45.92	46.30	24.44	30.98	31.92	32.98	32.98	29.14	32.17	32.17	33.45	33.45	28.87	37.12	37.42	37.78	36.66	31.42	46.30	46.30	46.66	46.66	31.57	38.48	38.75	39.36	39.21
737-800																														
Airport	4.94	4.97	4.97	6.34	6.34	4.20	6.60	6.60	6.98	6.98	4.08	5.75	5.75	6.04	6.04	3.52	7.92	7.92	8.14	8.14	3.54	7.87	7.87	8.14	8.14	4.06	6.62	6.62	7.13	7.13
Airservices	3.35	3.60	3.60	3.60	3.60	2.92	2.97	2.97	2.97	2.97	4.08	4.20	4.20	4.20	4.20	5.89	6.47	6.47	6.47	6.47	7.47	8.13	8.13	8.13	8.13	4.74	5.07	5.07	5.07	5.07
Security	0.43	0.60	0.60	2.63	2.77	1.22	0.60	0.50	0.40	0.40	0.70	0.76	0.76	0.50	0.50	1.00	1.00	2.79	3.00	3.10	1.76	1.32	1.32	0.78	0.78	1.02	0.86	1.19	1.46	1.51
Total 737-800	8.72	9.17	9.17	12.57	12.71	8.35	10.17	10.07	10.35	10.35	8.86	10.71	10.71	10.74	10.74	10.41	15.38	17.18	17.60	17.71	12.77	17.32	17.32	17.05	17.05	9.82	12.55	12.89	13.66	13.71
Dash 8-300																														
Airport	4.69	4.71	4.71	6.34	6.34	3.99	6.60	6.60	6.98	6.98	3.87	5.46	5.46	5.73	5.73	3.34	7.92	7.92	8.14	8.14	3.36	3.36	3.36	3.48	3.48	3.85	5.61	5.61	6.13	6.13
Airservices	3.17	3.42	3.42	3.42	3.42	2.77	2.81	2.81	2.81	2.81	3.87	3.98	3.98	3.98	3.98	5.59	6.13	6.13	6.13	6.13	7.09	7.71	7.71	7.71	7.71	4.50	4.81	4.81	4.81	4.81
Security	0.00	0.00	0.00	2.63	2.77	0.75	0.60	0.50	0.40	0.40	0.08	0.72	0.72	0.48	0.48	0.00	0.00	2.79	3.00	3.10	0.00	0.00	0.00	0.00	0.00	0.17	0.26	0.80	1.30	1.35
Total Dash 8-300	7.86	8.13	8.13	12.39	12.53	7.51	10.01	9.91	10.19	10.19	7.82	10.16	10.16	10.19	10.19	8.93	14.05	16.85	17.27	17.38	10.45	11.07	11.07	11.18	11.18	8.51	10.68	11.22	12.24	12.29
SAAB340B																														
Airport	5.39	5.39	5.39	6.34	6.34	4.15	6.60	6.60	6.98	6.98	4.02	5.67	5.67	5.96	5.96	3.48	7.92	7.92	8.14	8.14	3.50	3.50	3.50	3.62	3.62	4.11	5.82	5.82	6.21	6.21
Airservices	3.30	3.55	3.55	3.55	3.55	2.88	2.93	2.93	2.93	2.93	4.02	4.14	4.14	4.14	4.14	5.81	6.38	6.38	6.38	6.38	7.37	8.02	8.02	8.02	8.02	4.68	5.00	5.00	5.00	5.00
Security	0.00	0.00	0.00	2.63	2.77	0.75	0.60	0.50	0.40	0.40	0.08	0.75	0.75	0.50	0.50	0.00	0.00	2.79	3.00	3.10	0.00	0.00	0.00	0.00	0.00	0.17	0.27	0.81	1.30	1.35
Total SAAB340B	8.69	8.95	8.95	12.52	12.66	7.78	10.13	10.03	10.31	10.31	8.13	10.56	10.56	10.59	10.59	9.29	14.30	17.09	17.51	17.62	10.87	11.51	11.51	11.63	11.63	8.95	11.09	11.63	12.51	12.56
Metro 23																														
Airport	7.96	7.96	7.96	7.96	7.96	4.23	6.60	6.60	6.98	6.98	4.11	5.79	5.79	6.08	6.08	3.55	7.92	7.92	8.14	8.14	3.57	3.57	3.57	3.69	3.69	4.68	6.37	6.37	6.57	6.57
Airservices	3.37	3.63	3.63	3.63	3.63	2.94	2.99	2.99	2.99	2.99	4.11	4.22	4.22	4.22	4.22	5.93	6.51	6.51	6.51	6.51	7.52	8.18	8.18	8.18	8.18	4.77	5.10	5.10	5.10	5.10
Security	0.00	0.00	0.00	1.97	1.97	0.75	0.60	0.50	0.40	0.40	0.09	0.76	0.76	0.51	0.51	0.00	0.00	2.79	3.00	3.10	0.00	0.00	0.00	0.00	0.00	0.17	0.27	0.81	1.17	1.20
Total Metro 23	11.33	11.59	11.59	13.56	13.56	7.92	10.19	10.09	10.37	10.37	8.30	10.78	10.78	10.81	10.81	9.47	14.43	17.22	17.64	17.75	11.09	11.74	11.74	11.87	11.87	9.62	11.74	12.28	12.85	12.87

Note Calculated on a return passenger basis, that is, assuming one arrival and one departure, for price schedules as at 31 January and 31 July each year.

Sources BTRE estimates based on airport public price schedules supplied by airport operators; Airservices Australia published price schedule.

Australian Government
Department of Transport and Regional Services
Bureau of Transport and Regional Economics

avline

issue 4 May 2004

acknowledgements

This issue of *Avline* was compiled by Peter Hoss, Desiree Campbell and Dr Michael Simpson with the assistance of the BTRE Statistics Section (aviation data).

Desktop publishing by Thomas Smith.

The BTRE is particularly grateful for the assistance of Adelaide, Brisbane, Melbourne, Perth and Sydney airports and the Regulation Group of the Department of Transport and Regional Services.

contact

e-mail / telephone / fax / post

contact

For further information on this publication please contact:

Peter Hoss at avline@dotars.gov.au
Tel (02) 6274 6840 Fax (02) 6274 6816.

This publication is available free of charge from the Bureau of Transport and Regional Economics:

GPO Box 501, Canberra ACT 2601, Australia
email: avline@dotars.gov.au or Tel (02) 6274 7210.

internet

addresses

internet

Download this issue of *Avline* and back issues:
http://www.btre.gov.au/avline.htm

Bureau of Transport and Regional Economics home page, including detailed aviation statistics:
http://www.btre.gov.au/

The Bureau of Transport and Regional Economics operates within the Australian Government Department of Transport and Regional Services

ISSN 1447-8668

PRINTED BY CPP INSTANT PRINTING, CANBERRA