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Bureau of Transport and Regional Economics



Bass Strait Passenger Vehicle Equalisation Scheme

BTRE Monitoring Report No.10
2005–06

Bureau of Transport and Regional Economics

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Equalisation Scheme**

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Foreword

This report presents the results of the Bureau of Transport and Regional Economics' (BTRE) tenth annual review of the Bass Strait Passenger Vehicle Equalisation Scheme. It covers the operation and impact of the Scheme up to (and including) 2005–06.

The 2002 Ministerial Directions (Appendix A) require the Bureau to produce this annual monitoring report.

The BTRE gratefully acknowledges the assistance provided by TT-Line, Tourism Tasmania, and the Tasmanian Assistance Services team at Centrelink, and the Maritime and Land Transport Division of the Department of Transport and Regional Services.

The study was undertaken by Tim Risbey and Mark Cregan.

Phil Potterton
Executive Director
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June 2007

At a glance

- In 2005–06, the Australian Government spent \$31.36 million under the Bass Strait Passenger Vehicle Equalisation Scheme—a decrease of 3.1 per cent over 2004–05. Average reimbursement per TT-Line motor vehicle passenger decreased slightly (0.3 per cent) to \$81.40 in 2005–06.
- The one-way rebate remained at \$150 for a car, \$75 for motorbikes, \$21 for bicycles and up to \$300 for larger vehicles. The \$150 rebate on a car represented 22.4 per cent of the Bureau’s benchmark one-way Melbourne–Devonport sea fare for a couple with an eligible passenger car (also 22.4 per cent in 2004–05).
- Econometric modelling indicates the Scheme increased motor vehicle passenger numbers on the Melbourne–Devonport service by 60 500 in 2005–06. This is an increase of 24.1 per cent on the estimated level of traffic without the Scheme—a proportion that has fallen since the introduction of the Scheme.
- Approximately 1.44 million adult passengers travelled by air and sea across Bass Strait in 2005–06 (Table 2.1). This was an increase of 81 300 (6 per cent) on 2004–05. Over 85 per cent travelled by air (up from 80 per cent in 2004–05).
- The estimated number of adult sea passengers was 207 900—down 7700 on 2004–05 (3.6 per cent). The number of visitors choosing sea travel declined by 5500 (3.8 per cent) and the number of Tasmanian residents choosing sea travel declined by 2100 (3 per cent).
- The estimated number of visitors to Tasmania increased by an estimated 54 900 (7.2 per cent) to 812 500 in 2005–06. The proportion of adult visitors choosing to travel to Tasmania by sea decreased to 17.3 per cent (down from 19.3 per cent in 2004–05 and 22.5 per cent in 2003–04).
- Two operators provided ferry services in 2005–06. TT-Line Company Pty Ltd (TT-Line)—wholly owned by the Tasmanian Government—carried almost all sea passengers.
- TT-Line carried a total of 440 548 one-way passengers—a decrease of over 11 000—and 210 903 eligible vehicles in 2005–06.
- TT-Line reported a net profit of \$7.1 million for 2005–06, with an underlying operating loss of \$35.5 million. Operating revenues rose 1.9 per cent and (adjusted) operating costs increased 0.7 per cent.
- On 5 June 2006, the Tasmanian Government decided to sell the *Spirit of Tasmania III* and cease the Sydney service. The final service departed Sydney on 27 August 2006.
- The Tasmanian Government injected a further \$62.5 million into TT-Line in 2005–06 (in addition to a \$75.2 million capital injection in 2004–2005).
- In 2005–06, Scheme rebates fell to 19.7 per cent of TT-Line operating revenue—the third successive decline (partly due to the fall in eligible vehicle numbers).
- Approximately 4375 new tourists travelled on the Melbourne–Devonport route due to the Scheme in 2005–06, spending \$9.4 million in Tasmania. The Scheme also benefited Tasmanians, non-leisure visitors and Sydney travellers.

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Executive summary

Bass Strait Passenger Vehicle Equalisation Scheme

Passengers travelling with a vehicle across Bass Strait can receive a rebate funded by the Australian Government under the Bass Strait Passenger Vehicle Equalisation Scheme (the Scheme). The rebate is applied against the fare charged by a ferry operator to transport an accompanied passenger vehicle across Bass Strait.

The aim of the Scheme is 'to reduce the cost of sea travel across Bass Strait for passengers' accompanying an eligible vehicle. In 2005–06, the rebate was up to \$150 for a standard car, \$75 for motorbikes, \$21 for bicycles and up to \$300 for larger eligible vehicles.

Payments under the Scheme

The Scheme is demand driven. Total funding therefore varies with the number—and mix—of eligible vehicles carried by sea across Bass Strait.¹

In 2005–06, the Australian Government spent \$31.36 million under the Scheme—a decrease of 3.1 per cent over 2004–05. Scheme funding had increased substantially following the September 2002 changes in Ministerial Directions—changes which broadened the Scheme's coverage to additional vehicle types and increased the off-peak and shoulder season rebates (BTRE 2004).²

Over 99 per cent of total spending under the Scheme—\$31.33 million—went to eligible passengers with an accompanying vehicle travelling on TT-Line Company Pty Ltd (TT-Line) services. The average reimbursement per eligible TT-Line passenger was \$81.40—a decrease of 0.3 per cent over 2004–05.

Operation of the Scheme

Passengers must generally accompany their vehicles to be eligible for a rebate. Eligible passenger vehicles include motor cars, buses, motorcycles, motor homes, eligible passenger vehicles towing a caravan, and push bikes. In the case of TT-Line, passengers pay the vehicle fare net of the rebate and the rebate is paid direct to the operator.

In 2005–06, the number of one-way trips by TT-Line motor vehicle passengers on the Melbourne and Sydney sea services decreased by 10 954 (2.7 per cent), berth only passengers also decreased by 413 (0.7 per cent). Total reimbursements to TT-Line decreased 3.1 per cent compared with 2004–05.

Sea and air traffic and services

Approximately 1.44 million adult passengers travelled by air and sea across Bass Strait in 2005–06. This was an increase of approximately 81 300 (6 per cent) on 2004–05. The majority travelled by

¹ Scheme funding for services on the Sydney–Devonport route has been capped at \$8 million from 2004–2005 (Department of Transport and Regional Services 2005).

² From 1 September 2002 the off-peak (\$100) and shoulder (\$120) rebates were increased to \$150.

air—over 85 per cent (80 per cent in 2004–05). The number of domestic air passengers to/from Tasmania decreased by 3.7 per cent over 2004–05.

The estimated number of adult sea passengers was 207 900—down 7700 on 2004–05 (3.6 per cent). The number of visitors choosing sea travel declined by 5500 (3.8 per cent) and the number of Tasmanian residents travelling by sea declined by 2100 (3 per cent).

Air and sea adult visitor numbers increased by an estimated 54 900 (7.2 per cent) to 812 500 in 2005–06. A decline of almost 5500 (3.8 per cent) in the number of adult visitors travelling by sea was more than offset by an increase of 60 500 travelling by air (up 9.8 per cent). Consequently, sea travel declined as the mode of choice for visitors—the proportion of adult visitors choosing to travel to Tasmania by sea was 17.3 per cent (down from 19.3 per cent in 2004–05).

In 2005–06, the estimated number of visitors travelling for holiday or leisure purposes rose slightly for air (285 000) and was unchanged for sea (102 000), although visitors travelling by sea stayed longer—an average of fourteen nights compared with seven nights for air visitors. More visitors to Tasmania travelled by air than sea, but a higher proportion of sea visitors travelled for holiday or leisure purposes (73 per cent) than air (42 per cent).

Two operators provided sea services in 2005–06—TT-Line and Patrick Shipping.

TT-Line carried all sea passengers accompanying their motor vehicles. The number of TT-Line voyages decreased in 2005–06. Voyages by the *Spirit of Tasmania I/II* decreased by 20 (2.4 per cent). *Spirit of Tasmania III* voyages decreased by 16 (7.2 per cent).

In 2005–06, TT-Line carried 440 548 one-way passengers—down more than 11 000—and 210 903 eligible vehicles. These figures include traffic on the Sydney–Devonport service, which carried 80 837 one-way passengers—including 72 670 motor vehicle passengers—and 38 423 eligible vehicles in 2005–06.

Despite the drop in traffic during 2005–06—the average number of TT-Line passengers and vehicles carried per voyage increased due to the decrease in the number of voyages.

Changes in fares

Sea passengers pay different passenger and vehicle fares, depending on the route, season, style of accommodation and type of passenger vehicle.

TT-Line fares remained relatively unchanged during 2005–06. The only fare change to occur during 2005–06 was on 1 September 2005 when TT-Line increased tertiary student fares to the same price as a full adult fare. All other fares remained unchanged.

Low discount air fares are driving growth in air passengers between the mainland and Tasmania, despite an apparent increase in discount air fares. The Bureau's discount fares index increased 26 per cent between June 2005 and June 2006 (compared with a decline of 20 per cent in the previous year), returning to similar June 2004 levels.

In order to put the Scheme rebate in context, it is useful to consider the cost of broadly comparable sea and air transport packages in 2005–06. This comparison needs to be treated with caution—particularly given the variability of discount air fares.

With this proviso, the comparison does indicate that in 2005–06:

- sea travel with an accompanying vehicle was likely to have been a better option for those planning a longer (fourteen day) stay for all seasons; and
- the fly-drive scenario with a heavily discounted airfare—subject to availability—may have been the best deal in the peak and off-peak seasons only for those planning a shorter (seven night) stay.

Impact of the Scheme on traffic

The rebate substantially reduces the cost of freighting an accompanying vehicle for eligible passengers. In 2005–06, the \$150 rebate on a standard car represented 22.4 per cent of the Bureau's benchmark one-way Melbourne–Devonport sea fare for a couple travelling with an eligible passenger car (also 22.4 per cent in 2004–05).

The total number of motor vehicle passengers declined again in 2005–06. Following a substantial³ increase in motor vehicle passenger numbers in 2002–03, growth was modest in 2003–04 and a decline was recorded in 2004–05.

In order to more fully assess the impact of the Scheme the Bureau has conducted econometric modelling of the Melbourne–Devonport sea market. The sea model does not include the Sydney–Devonport route. The Bureau cautions that the econometric models have limitations and the results should be interpreted with care.

The econometric modelling of the sea market indicates that in 2005–06 the Scheme increased motor vehicle passenger movements using the Melbourne–Devonport ferry service by approximately 60 500—24.1 per cent of motor vehicle passenger movements. This proportion has fallen since the introduction of the Scheme.

Traffic trends since 1996 indicate the Scheme has contributed to motor vehicle passenger numbers and encouraged sea passengers to take their own motor vehicle.

Assessing the impact on tourism

The Scheme increased the number of one-way motor vehicle sea passengers on the Melbourne–Devonport route including some that may have otherwise travelled as berth only sea passengers or by air.⁴ Berth only passengers have consistently declined since the introduction of the Scheme.

Trend analysis of the five years prior to the Scheme indicates a small trend growth in the number of berth only passengers—extrapolating this trend indicates that the Scheme may have reduced the number of berth only passenger movements by approximately 43 000 in 2005–06. This indicates the Scheme may have resulted in a net increase of approximately 17 500⁵ one-way sea passenger movements—equivalent to 8750 return trips between Melbourne and Devonport.

According to Tourism Tasmania visitor survey data approximately half of all sea passengers are visitors travelling for recreational purposes. The Bureau's indicative estimate of the number of new leisure visitors who travelled by sea from Melbourne in 2005–06 is 4375.

If these new visitors spent an average of \$2146 per person⁶, then the net new tourism spending would have been \$9.4 million in 2005–06. This estimate of spending by these new visitors is indicative only and is for visitors travelling for leisure purposes between Melbourne and Devonport—it does not include additional spending by visitors travelling for business and other purposes, visitors using the Sydney–Devonport service, or benefits to Tasmanian residents travelling by sea who received the rebate.

Tourism Tasmania survey data indicates that the number of adult visitors travelling by sea to Tasmania fell in 2005–06, implying reduced Scheme-related tourism spending.

3 The substantial increase in 2002–03 was due to TT-Line capacity and frequency increases, coupled with changes to Scheme eligibility and increases in the off-peak and shoulder rebates (BTRE 2006)

4 No adjustment has been made for reduced air travellers as a result of lower sea fares due to the rebate. This is because the econometric modelling of the air market in 2004–05 indicates sea fares are not a significant factor explaining variation in the number of air passengers.

5 This estimate of approximately 43 000 one-way passenger movements is the difference between the total motor vehicle passenger econometric estimate and the trend analysis of berth only passengers that became motor vehicle passengers due to the Scheme.

6 The average spending by sea passengers (for all journey purposes) was \$2146 per trip in 2005–06 (Tourism Tasmania 2007).

Financial position of the operators

The major operator TT-Line reported a net profit of \$7.1 million in 2005–06. This net profit was due to ship revaluations that reflected exchange rate movements rather than a fundamental change in operating conditions.

TT-Line's underlying operating loss for 2005–06 was \$33.5 million—of which \$27.7 million was attributable to the *Spirit of Tasmania III*—a reduction in the 2004–05 operating loss of \$36 million.

Operating revenues were \$158.88 million, up \$2.2 million (1.9 per cent). Adjusted operating expenses were \$192.3 million, up \$1.4 million (0.7 per cent). Significant changes in major operating expenses in 2005–06 included:

- General expenses—down 24.4 per cent (–\$3.9 million); and
- Customer acquisition costs—up 22.8 per cent (+\$3 million).

On 5 June 2006 the Tasmanian Government decided to sell the *Spirit of Tasmania III* and cease the Sydney service. The ferry was subsequently sold to Corsica Ferries for \$111.475 million, recouping all acquisition costs (TT-Line 2006b).

The Tasmanian Government injected a further \$62.5 million into TT-Line in 2005–06 for debt repayments/reductions, capital funding and operational requirements. This was in addition to a \$75.2 million capital injection in 2004–2005.

After adjusting for capital items, average revenue per voyage has risen after three consecutive years of falls. Average voyage operating expenses in 2005–06 increased by 4.3 per cent. This followed a 16.5 per cent increase in 2004–05. The average (adjusted) cost per passenger has increased since 2001–02.

In 2005–06, Scheme rebates fell to 19.7 per cent of TT-Line operating revenue—the third successive decline—partly due to the fall in eligible vehicle numbers. This compares to 17.6 per cent of revenue in the first full year of application. Reimbursements had increased from 17.6 per cent of revenue in 1997–98 (the first full year of application) to a peak of 23.7 per cent of revenue in 2002–03.

Chapter 1 Introduction

History of the Scheme

In August 1996, the Commonwealth Minister for Transport and Regional Development announced the introduction of the Bass Strait Passenger Vehicle Equalisation Scheme (the Scheme). The Minister noted that the resulting fare reductions would help to increase the demand for travel across Bass Strait, with direct benefits to the tourist industry and potential growth in jobs, investment and population for Tasmania (Sharp 1996, p. 1).

The Scheme applied to travel from 1 September 1996. It provided a rebate against the fare charged by a sea ferry operator to transport an accompanied passenger vehicle across Bass Strait.

On 1 March 2001, the Scheme was extended to cover the carriage of vehicles between King Island and mainland Australia. As sea passenger services were not provided on the King Island route, the rebate was made available for passenger vehicles carried by sea where the driver travelled by commercial air service on or about the same day.

The Scheme operates under a set of Ministerial Directions. In 2005–06, the Scheme was administered in accordance with Directions issued in September 2002 (Department of Transport and Regional Services 2002). Significant changes to the Scheme in the September 2002 Ministerial Directions included replacing the previous seasonal structure for rebates by a constant rebate throughout the year, and extending the Scheme to include additional vehicle types.

Administration of the Scheme

The Ministerial Directions are administered by Tasmanian Assistance Services—a business unit within Centrelink. Policy direction and funding for the Scheme during 2005–06 was provided by the Maritime and Land Transport Division of the Department of Transport and Regional Services.

Requirement for monitoring

The Ministerial Directions require the Bureau of Transport and Regional Economics—previously the Bureau of Transport Economics—to monitor the effectiveness of the Scheme on an annual basis (see Appendix A). They state that the Bureau should have specific regard to movements in a service operator's revenue and annual operating costs, and to the annual number of eligible passengers, eligible passenger vehicles and passengers travelling under related bookings.

The Bureau has prepared nine previous reports on the Scheme, the most recent covering 2004–05. It has generally concluded that the fare reductions provided by the Scheme have resulted in increased sea travel across Bass Strait.

Outline of the report

This report presents the results of the tenth annual review of the Scheme, covering 2005–06. It incorporates data provided by TT-Line Company Pty Ltd (TT-Line) (from its management database and annual reports), Tasmanian Assistance Services and Tourism Tasmania.

Chapter 2 covers changes in Bass Strait sea and air services and traffic levels.

Chapter 3 describes the operation of the Scheme in terms of its coverage, payment of the rebate, claims for reimbursement and levels of payments.

Chapter 4 covers the changes in air and sea fares and compares various travel package scenarios.

The impact of the Scheme on traffic levels is examined in Chapter 5, which includes the results of econometric modelling undertaken by the BTRE.

Changes in TT-Line's revenue and expenses are considered in Chapter 6.

Appendices present the monitoring provisions in the 2002 Ministerial Directions and information on the econometric model.

Summary

- Tourism and many other activities in Tasmania rely on transport services across Bass Strait.
- Passengers accompanying an eligible vehicle across Bass Strait can receive a rebate funded by the Australian Government.
- The aim of Bass Strait Passenger Vehicle Equalisation Scheme is 'to alleviate the cost of seagoing travel for passengers' accompanying an eligible vehicle'.
- The rebate is applied against the fare charged by a ferry operator to transport an accompanied eligible passenger vehicle across Bass Strait.

Chapter 2 Bass Strait services and traffic

Approximately 1.44 million adult passengers travelled by air and sea across Bass Strait in 2005–06 (Table 2.1). This was an increase of approximately 81 300 (6 per cent) on 2004–05. The majority—over 85 per cent (80 per cent in 2004–05)—travelled by air. The estimated number of adult sea passengers was 207 900—down 7700 on 2004–05 (3.6 per cent). The number of visitors choosing sea travel declined 5500 (3.8 per cent) and the number of Tasmanian residents travelling by sea declined 2100 (3 per cent).

The estimated number of visitors to Tasmania increased by 54 900 (7.2 per cent) to 812 500 in 2005–06. The proportion of adult visitors choosing to travel to Tasmania by sea decreased to 17.3 per cent (down from 19.3 per cent in 2004–05 and 22.5 per cent in 2003–04). The number of adult visitors travelling by sea fell 5500 (3.8 per cent) and the number of adult visitors travelling by air increased by 60 500 (9.8 per cent).

Table 2.1 Estimated adult return passengers travelling between Tasmania and the mainland by purpose, 2005–06^a ('000)

<i>Purpose of travel</i>	<i>Air</i>	<i>Sea</i>	<i>Total</i>
<i>Visitors to Tasmania</i>			
Holiday/leisure	285.2	102.4	387.6
Visiting friends/relatives	212.5	16.1	228.5
Business	123.0	11.3	134.3
Conference	19.7	0.8	20.5
Other/not specified	31.4	10.2	41.6
Total visitors	671.7	140.8	812.5
<i>Tasmanian residents</i>			
Holiday/leisure	203.0	21.2	224.2
Visiting friends/relatives	163.5	18.5	181.9
Business	131.1	8.3	139.3
Conference	15.5	0.1	15.6
Moving out of Tasmania	7.8	15.8	23.6
Other/not specified	41.4	3.3	44.7
Total Tasmanians	562.2	67.2	629.4
Total passengers	1 234.0	207.9	1 441.9

a. Excludes minors and day trippers. Data collected by survey and subject to sampling error.

Source Tourism Tasmania Tasmanian Visitor Survey—personal communications (2006).

In 2005–06, the estimated number of visitors travelling for holiday or leisure purposes rose slightly for air and was stable for sea, indicating a possible turnaround on the downturn in tourist numbers to Tasmania seen in 2004–05 (BTRE 2006b; and Table 2.1 above). More visitors to Tasmania travelled by air than sea, but a higher proportion of sea visitors travelled for holiday or leisure purposes (73 per cent) than air (42 per cent) (Table 2.1).

The estimated number of adult Tasmanian residents—excluding day trippers—travelling to the mainland by air and sea was 629 400—an increase of 4.4 per cent on 2004–05 (Table 2.1). Around 36 per cent of residents—by both sea and air—travelled for holiday or leisure reasons (37 per cent in 2004–05). The proportion of adult Tasmanians choosing to travel by sea in 2005–06 was 10.7 per cent—down from 11.5 per cent in 2004–05 and 15.3 per cent in 2003–04 (BTRE 2006b).

Sea services and passengers

Three operators provided sea services in 2005–06—TT-Line, Patrick Shipping and Southern Shipping. Southern Shipping carried no eligible vehicles in 2005–06 and will not be discussed further. TT-Line provided the main sea passenger service across Bass Strait in 2005–06. TT-Line carried a total 440 548 one-way passengers and 210 903 eligible vehicles in 2005–06. The number of one-way motor vehicle passengers carried by TT-Line was 384 974—a decrease of 10 954 (2.7 per cent). Berth only passengers declined by 413 (0.7 per cent) and total sea passengers decreased by 11 367 (2.5 per cent).

Spirit of Tasmania I and *Spirit of Tasmania II* have operated Melbourne–Devonport since 1 September 2002, replacing the *Spirit of Tasmania* on this route. These two new vessels increased the passenger capacity by 212 per cent and the available motor vehicle capacity by 185 per cent (BTRE 2004). Each ship can carry up to 1400 passengers and 600 cars but have a maximum passenger capacity of 1040 on night crossings.

The *Spirit of Tasmania III* began operating the Sydney–Devonport route on 13 January 2004. This ship provides a different mix of accommodation to *Spirit of Tasmania I* and *II*, and includes hostel berths. The *Spirit of Tasmania III* can carry up to 1400 passengers and 410 cars (Sydney Port Corporation 2004). Each trip is approximately 20 hours, twice the duration of the Melbourne–Devonport trip (TT-Line undated). In 2005–06, the Sydney–Devonport service carried 80 837 one-way passengers (an increase of 35.8 per cent over 2004–05), including 72 670 motor vehicle passengers (an increase of 38 per cent), and 38 423 eligible vehicles in the year to 30 June 2006.⁷

In addition to TT-Line, Patrick Shipping operated the *Searoad Mersey*—a freight only service across Bass Strait in 2005–06. The *Searoad Mersey* carried only 205 eligible motor vehicles in 2005–06, compared with 210 903 carried by TT-Line (Table 2.2).

Table 2.2 Total eligible vehicles carried by operator 2005–06

Operator	Eligible vehicles carried	Share of total (per cent)
TT-Line	210 903	99.9
Patrick Shipping	205	0.1
Total eligible vehicles	211 108	100.0

Source Tasmanian Assistance Services—personal communications 2006.

This report focuses on TT-Line services given their importance.

Between 1995–96 and 2004–05 the number of voyages has increased from 295 to 812 (Table 2.3). In addition, the average vessel size—and hence available capacity—increased substantially with the introduction of the *Spirit of Tasmania I* and *II*.

TT-Line states it reduced the numbers of scheduled voyages on both the Sydney and Melbourne services in 2004–05 as a cost cutting measure (TT-Line 2005c p. 18). The number of voyages reduced in 2005–06. Voyages by the *Spirit of Tasmania I/II* decreased by 20 (2.4 per cent) and *Spirit of Tasmania III* voyages decreased by 16 (7.2 per cent) (Table 2.3).

While total TT-Line voyages decreased, traffic for the Sydney service increased in 2005–06 and traffic for the Melbourne service decreased in 2005–06 (Table 2.4). The average number of passengers and eligible vehicles per voyage increased on the Sydney service and continued to decline on the Melbourne–Devonport service.

⁷ The Sydney–Devonport service ceased in August 2006.

Table 2.3 TT-Line one-way voyages, 1995–96 to 2005–06

Voyages (no.)	95–96	96–97	97–98	98–99	99–00	00–01	01–02	02–03 ^a	03–04	04–05	05–06
<i>Spirit of Tasmania</i>	295	313	323	334	347	379	367	na	na	na	na
<i>Devil Cat</i>	na	na	117	171	108	99	118	na	na	na	na
<i>Spirit of Tasmania III</i>	na	na	na	na	na	na	na	846	894	832	812
<i>Spirit of Tasmania III^c</i>	na	na	na	na	na	na	na	na	135 ^b	220	204
Total Voyages	295	313	440	505	455	478	485	846	1029	1052	1016

na not applicable

a. Voyages made by *Spirit of Tasmania* in 2002–03 before its replacement in September 2002 are included in the number of voyages made by *Spirit of Tasmania III*.

b. *Spirit of Tasmania III* began operating the Sydney–Devonport route on 13 January 2004. Voyage total for 2003–04 therefore reflects approximately six months data.

c. *Spirit of Tasmania III* operated an extra Melbourne–Devonport service on 15 December 2004 and replaced its sister ships during their biannual dry-dockings from 17 July to 7 August.

Source TT-Line (2006c) and previous Annual Reports.

Table 2.4 TT-Line average traffic per voyage by service, 1995–96 to 2005–06

Year	Passengers ^a per voyage		Vehicles per voyage	
	Melbourne	Sydney	Melbourne	Sydney
1995–96	732	na	214	na
1996–97	828	na	258	na
1997–98	714	na	253	na
1998–99	680	na	246	na
1999–00	710	na	264	na
2000–01	692	na	266	na
2001–02	718	na	278	na
2002–03	596	na	248	na
2003–04	528	249	238	116
2004–05	472	271	226	131
2005–06	443	396	212	188

na not applicable.

a. Includes passengers with an accompanying motor vehicle and berth only passengers.

b. The Sydney–Devonport route represents six months of traffic data. The eligible vehicles per voyage figures for 2003–04 are derived by vehicles per claim period which may not correspond exactly to TT-Line figures.

Source TT-Line (2006c) and previous Annual Reports.

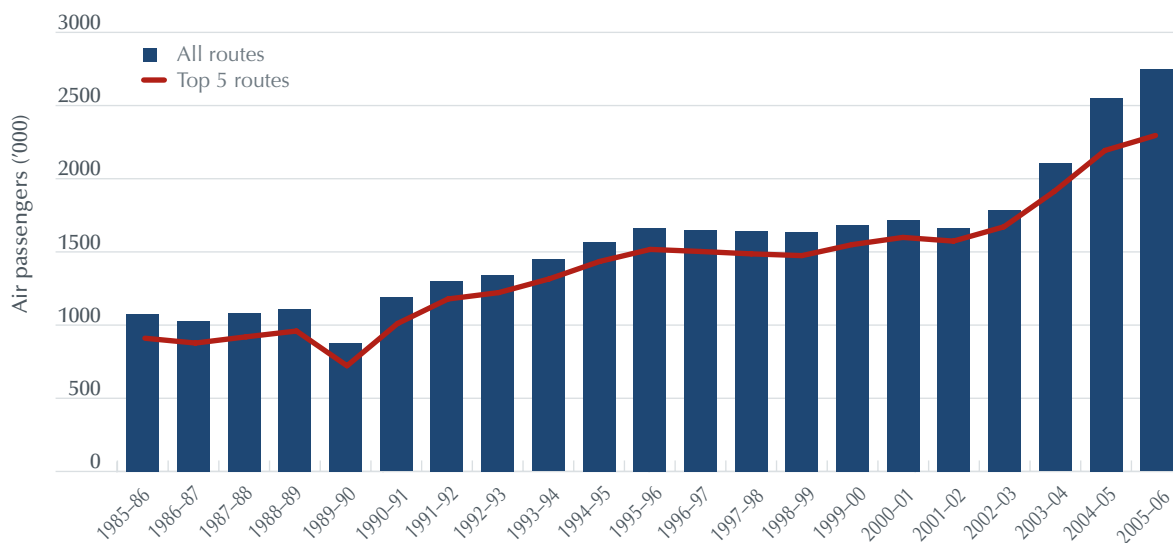
Air services and passengers

Total domestic air passengers to and from Tasmania increased by 6.3 per cent in 2005–06. The top five routes accounted for 2.3 million one-way trips—84 per cent—of all air passengers on Tasmanian interstate routes (Figure 2.1). One-way trips by revenue passengers on scheduled domestic regular public transport services between Tasmania and the mainland increased by 163 000 in 2005–06. Air passenger numbers increased from 2.58 million in 2004–05 to 2.75 million in 2005–06.

Virgin Blue began operating flights between Melbourne and Launceston on the 8 November 2001 (Virgin Blue, 2001). Jetstar—a low fares airline wholly owned by Qantas—commenced operations to Tasmania on 25 May 2004 (Jetstar, 2004). New service routes between Adelaide and Hobart, and Brisbane and Launceston began in November 2004 and December 2004 respectively.

The entry of the low cost carriers and the introduction of new routes has both increased the total number of air passengers and lowered the share of the traditional top five routes between Tasmania and the mainland.

Figure 2.1 Total air passengers ('000) between Tasmania and the mainland—one-way trips, 1985–86 to 2005–06



Note Passenger numbers are one-way trips by revenue passengers—those passengers paying any level of fare on scheduled domestic regular public transport services. Top five routes include Hobart–Melbourne, Launceston–Melbourne, Hobart–Sydney, Devonport–Melbourne, and Launceston–Sydney.

Source BTRE Domestic Air Passenger Data.

Summary

- 1.44 million adult passengers travelled across Bass Strait in 2005–06—an increase of approximately 81 300 (6 per cent) on 2004–05.
- The majority of passengers—over 85 per cent—travelled by air in 2005–06. The number of domestic air passengers to/from Tasmania increased 6.3 per cent.
- An estimated 207 900 adult passengers travelled by sea, a decrease of 7700 over 2004–05. The number of adult visitors travelling by sea decreased almost 5500 and the number of adult Tasmanian residents travelling by sea fell by just over 2100.
- Visitor numbers increased 7.2 per cent to almost 812 500 in 2005–06.
- Nearly half of all visitors travelled for holiday or leisure purposes—73 per cent of sea visitors and 42 per cent of air visitors. In 2005–06, the estimated number of visitors traveling for holiday or leisure purposes rose slightly for air and stayed level for sea, indicating a possible turnaround on the downturn in tourist numbers to Tasmania seen in 2004–05.
- The proportion of adult Tasmanians choosing to travel by sea in 2005–06 was 10.7 per cent—down from 11.5 per cent in 2004–05 and 15.3 per cent in 2003–04. The number travelling by sea decreased 2100 (3 per cent) and the number travelling by air increased 28 400 (5.3 per cent).
- Two operators provided sea services in 2005–06—TT-Line and Patrick Shipping. TT-Line carried all sea passengers and all accompanying eligible vehicles. Patrick Shipping carried unaccompanied eligible motor vehicles.
- TT-Line carried a total 440 548 one-way passengers and 210 903 eligible vehicles in 2005–06. The number of one-way motor vehicle passengers carried by TT-Line was 384 9974—a decrease of 10 954 (2.8 per cent) over 2004–05.

- The *Spirit of Tasmania III* carried 80 837 one-way passengers (an increase of 35.8 per cent over 2004–05), including 72 670 motor vehicle passengers (an increase of 38 per cent), and 38 423 eligible vehicles in 2005–06.
- While total TT-Line voyages decreased, traffic for the Sydney service increased in 2005–06 and traffic for the Melbourne service decreased in 2005–06. The average number of passengers and eligible vehicles per voyage increased on the Sydney service and continued to decline on the Melbourne–Devonport service.

Chapter 3 Operation of the Scheme in 2005–06

The Scheme covers passenger vehicles with an accompanying driver. Eligible passenger vehicles include motor cars, buses, motorcycles and—from 1 September 2002—motor homes, eligible passenger vehicles towing a caravan, and push bikes.

In order to be eligible for the rebate, vehicles must be primarily designed to carry passengers on public roads or be deemed to be motor homes or campervans. Vehicles designed to carry cargo are not eligible for the rebate and are carried as freight.

The Scheme applies to any service operator providing passenger and vehicle services between Tasmania and mainland Australia on an eligible route, or carrying vehicles between King Island and mainland Australia.

Scheme rebates

Table 3.1 summarises the one-way rebates for eligible vehicles in 2005–06. These rebates reflect the 1 September 2002 changes to the Ministerial Directions that raised the rebate in the off-peak and shoulder periods to the peak season rebate, and extended the Scheme to other vehicle types. TT-Line continues to apply a seasonal fare structure (Chapter 4).

The 1 September 2002 change to a constant rebate reduced the aggregate sea fare for passengers with an eligible accompanying vehicle in the shoulder and off-peak periods. Rebates on the King Island route are constant throughout the year.

Table 3.1 One-way rebates for eligible vehicles on the main Bass Strait and King Island route, 1 July 2005 to 30 June 2006

<i>Eligible Vehicle Class</i>		<i>Rebate (\$)</i>
Motor car or bus		Up to 150
Motor home		Up to 300
Eligible passenger vehicle towing a caravan		Up to 300
Motorcycle		Up to 75
Bicycle		21
Notes	The round-trip rebate is exactly double the one-way trip rebate. Prior to 1 September 2002 an off-peak rebate applied from 1 July to 31 August and 27 April to 30 June, and a shoulder rebate applied from 1 September to 5 December and from 26 January to 26 April.	
Sources	Department of Transport and Regional Services (2002, pp.10–11). TT-Line—personal communications 2006.	

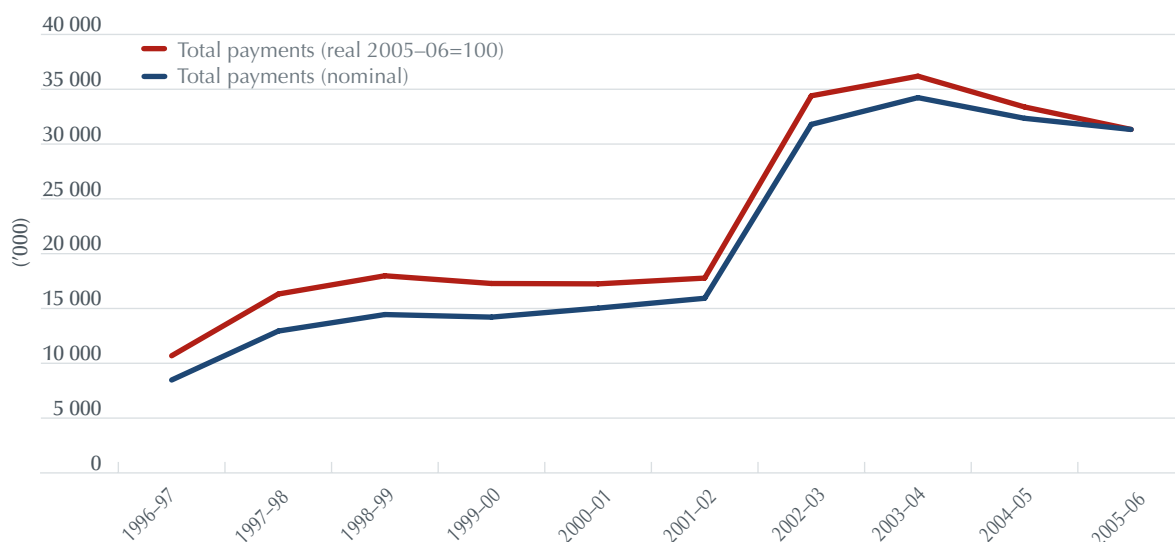
Reimbursements and payments under the Scheme

The Scheme is demand driven. Total funding therefore varies with the number—and mix—of eligible vehicles carried by sea across Bass Strait.

In 2005–06, the Australian Government spent \$31.36 million under the Scheme—a decrease of 3.1 per cent over 2004–05. Over 99 per cent of total spending under the Scheme—\$31.33 million—went to eligible passengers with an accompanying vehicle travelling on TT-Line services.

As shown in Figure 3.1, reimbursements had almost doubled in 2002–03—99.6 per cent—due to the combined effect of the increase in capacity with the introduction of the new TT-Line vessels—*Spirit of Tasmania I* and *Spirit of Tasmania II*—and the 1 September 2002 changes to the Ministerial Directions (Table 3.1 and Figure 3.1).

Figure 3.1 Total ‘actual’ rebate reimbursements under the Bass Strait Passenger Vehicle Equalisation Scheme, 1996–97 to 2005–06



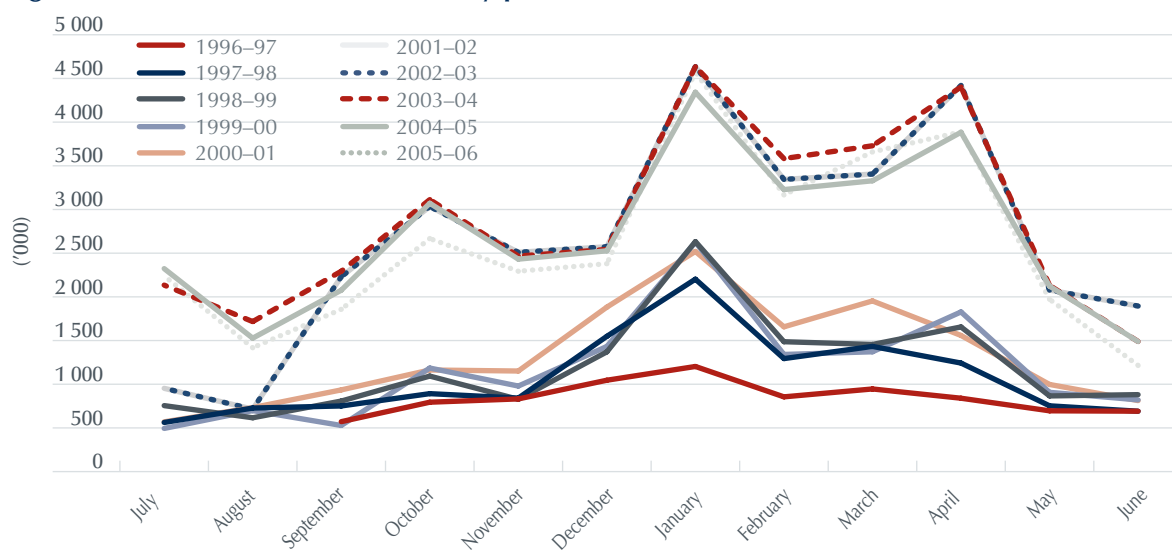
Note 'Actual' refers to the eligible vehicles actually shipped and disregards advanced payment numbers for scheduled bookings.

Sources Tasmanian Assistance Services—personal communications October 2006, and earlier.

Figure 3.2 shows the seasonal nature of reimbursements—notably the peaks in January and April. Most notable in Figure 3.2 is the large increase in rebates paid to TT-Line in 2002–03 compared with previous years.

In 2005–06, the number of one-way motor vehicle passengers on TT-Line services decreased by 10 954—approximately 2.8 per cent—and total reimbursements to TT-Line decreased by 3.1 per cent (Table 3.2).

Figure 3.2 Value of TT-Line claims by period



Source Tasmanian Assistance Services—personal communications October 2006, and earlier.

The structure and amount of rebate per vehicle were unchanged in 2005–06 (Table 3.1) and the reduction in TT-Line’s nominal rebate payments (Table 3.2) reflects the decline in the total number of eligible vehicles.

Table 3.2 TT-Line’s average reimbursement per motor vehicle passenger 1996–97 to 2005–06

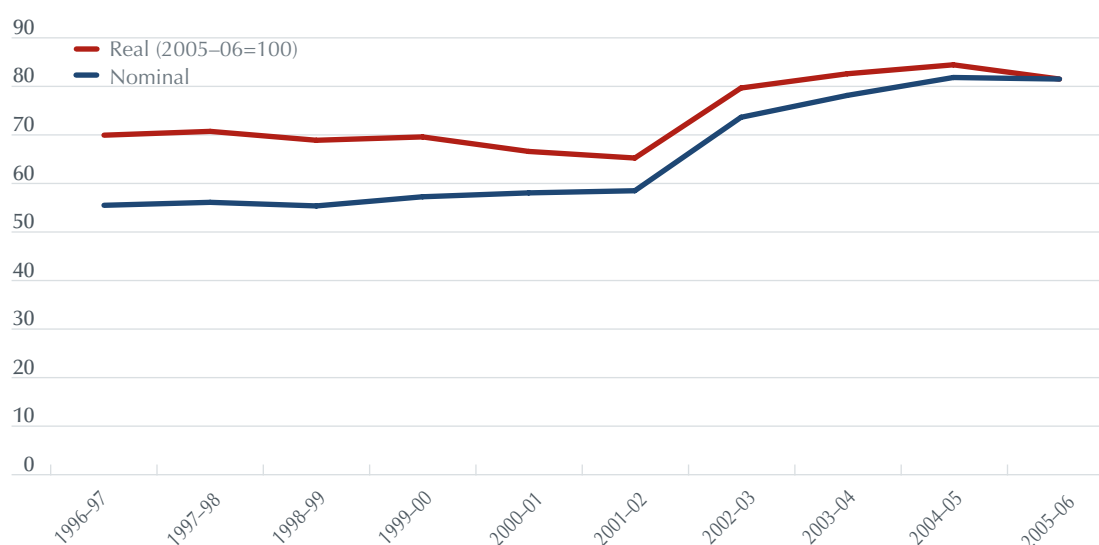
	Reimbursements paid to TT-Line (\$)		Motor vehicle passengers (one-way trips)	Average reimbursement per motor vehicle passenger (\$)	
	Nominal	Real ^a		Nominal	Real ^a
1996–97	8 474 915	10 685 588	153 045	55.4	69.8
1997–98	12 938 565	16 316 968	231 098	56.0	70.6
1998–99	14 446 755	17 983 421	261 487	55.2	68.8
1999–00	14 211 445	17 279 181	248 745	57.1	69.5
2000–01	15 030 670	17 245 169	259 438	57.9	66.5
2001–02	15 932 170	17 771 912	272 922	58.4	65.1
2002–03	31 793 065	34 401 528	432 498	73.5	79.5
2003–04	34 235 612	36 192 283	438 841	78.0	82.5
2004–05	32 349 808	33 385 002	395 928	81.7	84.3
2005–06	31 331 361	31 331 361	384 974	81.4	81.4

a. Real 2005–06 dollars.

Sources Tasmanian Assistance Services—personal communications 2006 and earlier; TT-Line—personal communications 2006 and earlier.

The average number of motor vehicle passengers per eligible motor vehicle for 2005–06 remained at 1.9. With the small decline in rebate payments the average nominal rebate to TT-Line per motor vehicle passenger decreased slightly (0.3 per cent) to \$81.40 in 2005–06 (Table 3.2). This decrease in the average rebate per motor vehicle person follows an increase in 2004–05 to \$81.70, a relatively modest increase in 2003–04 and an increase from \$58.40 to \$73.50 in 2002–03 (25.8 per cent) (Table 3.2 and Figure 3.3). The 2002–03 increase in the average rebate per person followed the September 2002 Ministerial Directions change to a flat one-way rebate of \$150—formerly \$100 off-peak and \$120 in the shoulder period (BTRE 2004).

Figure 3.3 Average reimbursement per motor vehicle passenger (\$), 1996–97 to 2005–06



Sources Tasmanian Assistance Services—personal communications 2006 and earlier; TT-Line—personal communications 2006 and earlier

Summary

- Passengers must generally accompany their vehicles to be eligible for a rebate. TT-Line passengers pay the vehicle fare net of the rebate and the rebate is paid direct to the operator.
- Total funding varies with the number and mix of eligible vehicles carried by sea across Bass Strait.
- In 2005–06, the Australian Government spent \$31.36 million under the Scheme—a decrease of 3.1 per cent over 2004–05.
- TT-Line reimbursements in 2005–06 decreased to \$31.33 million (down 3.1 per cent). TT-Line motor vehicle passenger one-way trips fell 10 954 (2.8 per cent).
- The average nominal rebate per passenger decreased slightly by 0.3 per cent to \$81.40—reflecting a stable average number of passengers per eligible vehicle.

Chapter 4 Changes in fares

Sea fares

The effect of the rebate for an eligible TT-Line motor vehicle passenger varies according to the passenger fare type (full fare or concession), season of travel, the passenger's choice of accommodation and their vehicle type. TT-Line's passenger and vehicle fares vary during the year reflecting the seasonal nature of demand.

In order to better understand the impact of the Scheme on sea fares, the Bureau has constructed a benchmark sea fare for a TT-Line sea travel package for two people with a given standard of accommodation and a motor car.

On 1 September 2005, TT-Line increased Tertiary student fares to the same price as a full adult fare. All other fares remained unchanged. Previous fare changes occurred on 1 August 2004 when TT-Line increased passenger fares between Melbourne–Devonport by \$3 one-way for all seasons, leaving Sydney–Devonport passenger fares unchanged (TT-Line 2004).⁹ The Bureau's benchmark Melbourne–Devonport peak season sea fare for an inside three to four berth cabin remained unchanged for all but tertiary students (Table 4.1).

Table 4.1 Benchmark one-way passenger fares Melbourne–Devonport (\$), end 2005–06^{a,b}

Passenger type	Off-Peak	Shoulder	Peak
Adult	187	196	215
Pensioner	114	120	132
Senior	159	167	184
Tertiary student	187	196	215
Child/student	97	101	111

a. Calculated using TT-Line fares for an inside cabin (three to four berth), the benchmark accommodation for calculating the rebate. Melbourne–Devonport fares exclude meals.

b. Calculated using published TT-Line fare information applicable at 30 June 2006. Actual fare levels during respective seasons may have differed. Season dates in 2005–06 were:

- Off-peak 27 April 2005–27 August 2005 and 1 May 2006–31 August 2006.
- Shoulder 28 August 2005–16 December 2005 and 26 January 2006–30 April 2006.
- Peak season fares applied 17 December 2005–25 January 2006.

Sources TT-Line—personal communications 2006.

Sydney–Devonport fares also included the increased Tertiary student fare, while all other fares remained unchanged. The previous fare increase occurred on 26 January 2005 when TT-Line introduced a new, lower passenger fare structure for the Sydney–Devonport service (TT-Line 2005a) which reduced the Bureau's benchmark peak season sea fare on this route by 43 per cent where it remains (Table 4.2).

⁹ TT-Line had previously increased Melbourne–Devonport fares on 1 September 2003 when overnight passenger fares increased by an average of 3.2 per cent, while day fares increased by \$15 in the peak period and \$10 in the shoulder period (TT-Line 2003).

Table 4.2 Benchmark one-way passenger fares Sydney–Devonport (\$), end 2005–06^{a,b}

Passenger type	Off-Peak	Shoulder	Peak
Adult	230	256	270
Senior	196	218	230
Tertiary student	230	256	270
Child/student	115	128	135
Pensioner	173	192	203

a. Calculated using TT-Line fares for an inside cabin (three to four berth), the benchmark accommodation used to calculate the rebate. Sydney–Devonport fares include dinner and brunch.

b. Calculated using published TT-Line fare information applicable at 30 June 2006. Actual fare levels during respective seasons may have differed. TT-Line introduced a new lower passenger fare structure for the Sydney service from 26 January 2005. Season dates 2005–06:

- Off-peak 27 April 2005–27 August 2005 and 1 May 2006–31 August 2006.
- Shoulder 28 August 2005–16 December 2005 and 26 January 2006–30 April 2006.
- Peak season fares applied 17 December 2005–25 January 2006.

Sources TT-Line—personal communications 2006.

Although Sydney passenger fares remain higher than for Melbourne, the Sydney–Devonport fare includes meals and the voyage is longer—approximately 20 hours compared with 10 hours for Melbourne–Devonport service.

In addition to their own fare, TT-Line passengers pay a fare for their accompanying passenger motor vehicle. Vehicle fares were unchanged in 2005–06. The current fares arose when TT-Line increased vehicle fares three times in 2004–05.

1. On 1 August 2004 off-peak and shoulder vehicle fares were increased to \$10 one-way for a standard vehicle on both the Melbourne and Sydney routes—peak period vehicle fares were unchanged at \$55 one-way. In raising fares the company stated that no increase in vehicle fares has been made since 1996, and that increases in passenger and vehicle fares ‘have been brought about due to considerable increases in cost areas such as fuel, security arrangements, insurance, and wages and salaries.’ (TT-Line 2004).
2. On 26 January 2005 standard one-way vehicle fares for the Sydney service were increased in the off-peak and shoulder periods from \$10 to \$55, giving the same vehicle fare all year round for this service (TT-Line 2005a).
3. On 15 June 2005 TT-Line further increased its vehicle fares on both Sydney and Melbourne services for all periods to \$59 one-way citing increasing security and fuel costs (TT-Line 2005b).

Table 4.3 presents TT-Line vehicle fares—net of the Scheme rebate—as at 30 June 2006. Fares in Table 4.3 reflect the 15 June 2005 TT-Line fare increases. Eligible vehicles towing trailers, or eligible vehicles other than motor homes/campervans, receive the standard vehicle rebate of \$150 one-way.

The benchmark sea package fare is for two adults travelling on the Melbourne–Devonport service in the peak season in a three to four berth inside cabin with an eligible standard car and buying two meals at \$15 each. The benchmark sea package fare as at the end of June 2005 comprises the passenger fare (two peak season adult sea fares at \$215 per person in a three to four berth inside cabin), the full standard vehicle fare without a rebate (\$209), and two meals purchased on board (\$30).

Motor vehicle fares for the Patrick Shipping service (*Searoad Mersey*) are shown in Table 4.4.

Eligible tourist vehicles on the Patrick Shipping service receive a free return trip, effectively halving the cost of a return trip. In order to receive the tourist vehicle rate the vehicle shipper must present air tickets, and return with the vehicle within three months.

Table 4.3 TT-Line one-way net fares for selected vehicle classes (\$), all routes, 30 June 2006^a

<i>Vehicle Type – Length</i>	<i>Off-Peak</i>	<i>Shoulder</i>	<i>Peak</i>
Standard cars/vehicles and vehicles towing trailers less than 2.0 metres wide			
0.1–5.0 metres	59	59	59
5.1–6.0 metres	99	99	99
Campervans/motor homes less than 2 metres wide			
0.1–6.0 metres	59	59	59
Motor homes/campervans and vehicles towing caravans ^a			
0.1–7.0 metres	59	59	89
7.1–8.0 metres	87	111	153
8.1–9.0 metres	115	163	217
9.1–10.0 metres	143	215	281
10.1–11.0 metres	171	267	345
Over 11.0m + \$/per/metre	28	52	64
Vehicles towing trailers or vehicles other than motor homes/campervans ^b			
0.1–6.0 metres	128	162	174
6.1–7.0 metres	209	209	239
7.1–8.0 metres	237	261	303
8.1–9.0 metres	265	313	367
9.1–10.0 metres	293	365	431
10.1–11.0 metres	321	417	495
Over 11.0m + \$/per metre	28	52	64
Motor bikes	40	40	40
Motor bike with side car or trailer	95	95	95
Push bikes	6	6	6

a. Fares reflect vehicle fare increases from 15 June 2006.

b. Where total length is greater than 6 metres or width greater than 2 metres. Maximum height is 4.2 metres. Maximum width is 2.4 metres. This group of eligible vehicles receive the standard \$150 rebate.

Sources TT-Line—personal communications 2006.

Table 4.4 Motor vehicle fares for Patrick shipping

<i>Vehicle category</i>	<i>Cost one-way^a</i>
Vehicle up to 4.3 m in length	\$317 + 4.1 per cent fuel surcharge + GST
Vehicle 4.3 to 5.5 m in length	\$420 + 4.1 per cent fuel surcharge + GST

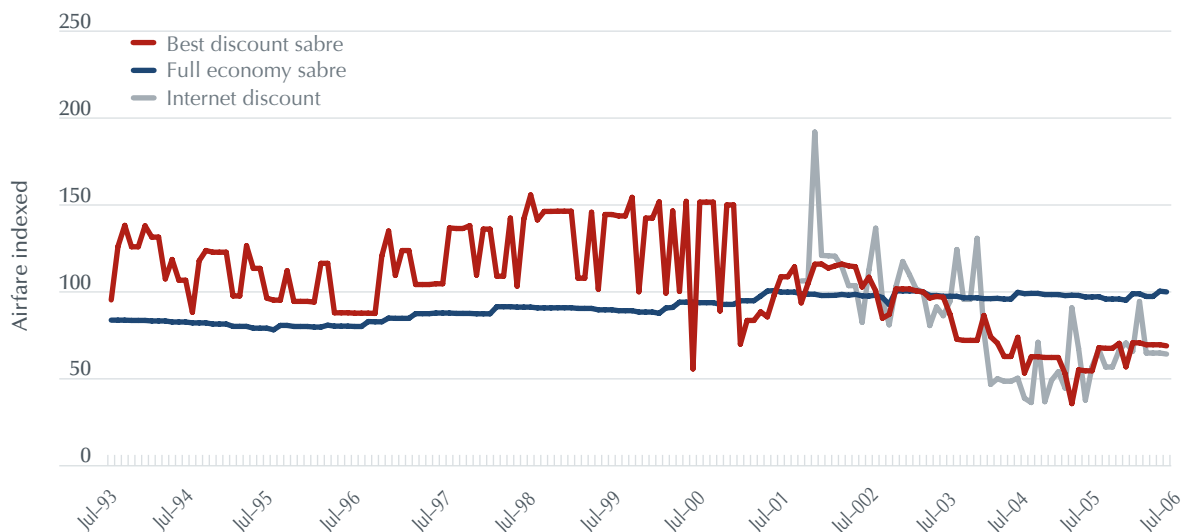
a. Bona fide tourist vehicles receive a free return trip, effectively halving the cost of a return trip. Conditions apply to tourist rate include: shipper must present air tickets, return trip within three months and same vehicle must be shipped both ways.

Sources Patrick Shipping—personal communications (2006).

Air Fares

The entry of low cost airlines into the Tasmanian market has resulted in substantial falls in discount air fares (Figure 4.1). Virgin Blue began operating flights between Melbourne and Launceston on 8 November 2001 (Virgin Blue, 2001). Jetstar—a low fares airline wholly owned by Qantas—commenced operations to Tasmania on 25 May 2004 (Jetstar, 2004).

Falls in discount air fares appear to be driving the rapid growth in the number of air passengers between the mainland and Tasmania since 2003–04. The Bureau's discount fares index increased 26 per cent between June 2005 and June 2006 (compared with a decline of 20 per cent in the previous year), returning to similar June 2004 levels.

Figure 4.1 Melbourne–Hobart air fare indices July 1993 to July 2006

Note The full economy and best discount fare indices are constructed by a survey of fares on the SABRE Computer Reservation System. SABRE Pacific does not warrant the accuracy of any of the data provided by its system. Under no circumstances will SABRE Pacific be liable for the loss of profits, loss of use of contracts, or for any economic or consequential loss whatsoever, whether arising from errors in data, negligence, breach of contract or otherwise. Base Index July 2003 = 100.

Source BTRE air fares database, unpublished data.

Air and sea passenger ‘package’ comparison

By reducing the cost of travel to Tasmania, the Scheme would be expected to result in additional visitors to Tasmania. However, the Scheme—by effectively reducing the cost of sea travel—also increases the attractiveness of sea travel as compared to air. When considering air and sea travel options the prospective visitor to Tasmania would consider more than just fares—most notably the costs of rental cars.

In order to put the rebate for eligible passenger vehicles in context, it is useful to consider the cost of broadly comparable sea and air transport packages—taking into account the average length of stay in Tasmania by sea and air visitors, and differences in visitor spending on transport. The package sea fare used is for two adults¹⁰ and a standard accompanied passenger vehicle between Melbourne and Devonport.

Table 4.5 and Figure 4.2 compare the cost of this sea transport package with the cost of a fly-drive package for two adults for seven night and fourteen night packages. It should be noted that the average length of stay for air passengers was seven nights, whereas sea passengers stayed an average fourteen nights. The comparison in this figure is a simplified example to illustrate differences between air and sea travel costs and should be treated with caution.

The months chosen for the comparison fall in TT-Line’s off-peak, peak and shoulder periods, while the air fares reflect similar levels. Discount air fares are highly variable and may be unavailable or too restrictive for some travellers.

The average amount spent on transport by air passengers while in Tasmania per night for 2005–06 was \$64, and the average spent on transport by sea passengers while in Tasmania was \$22—a difference of \$42 per night.

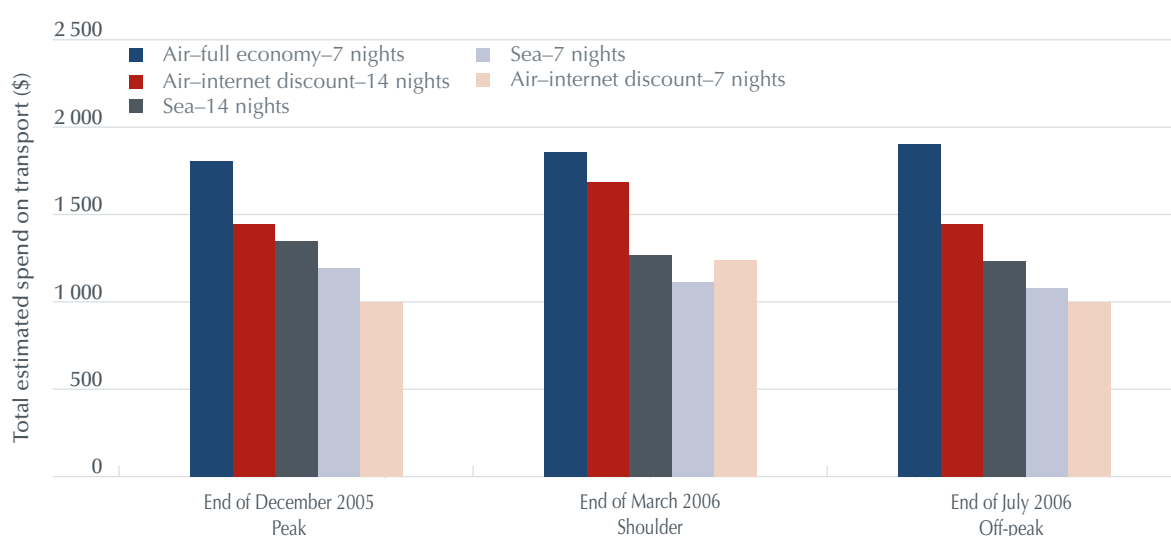
¹⁰ No concessions.

Table 4.5 Indicative transport package costs to Tasmania for sea and air travel

	End December 2005 Peak (\$)	End of March 2006 Shoulder (\$)	End of July 2006
Off-Peak (\$)			
Air: full economy seven nights	1805	1860	1904
Air: internet discount fourteen nights	1448	1688	1448
Sea: fourteen nights	1346	1270	1234
Sea: seven nights	1192	1116	1080
Air: internet discount seven nights	1000	1240	1000

Notes All amounts include either sea or air return fares for two adults and the costs spent on land travel such as car hire while in Tasmania.

Source TT-Line—personal communications (2006), Tourism Tasmania Tasmanian Visitor Survey—personal communications (2006, 2007).

Figure 4.2 Indicative transport package costs to Tasmania for sea and air travel

Notes The comparison in this figure is a simplified example to illustrate differences between air and sea travel costs and should be treated with caution. It is based on Tourism Tasmania visitor survey data on average lengths of stay and spends on transport while in Tasmania in 2005–06. The months chosen for the comparison fall in TT-Line's off-peak, peak and shoulder periods, while the air fares also reflect similar levels—however, air fares are variable and can vary week to week. 'Best discount' air fares are subject to availability and restrictions which may make them unsuitable for some travellers. End of July 2006 was chosen for the comparison as this was an off-peak period for air fares.

Source TT-Line—personal communications (2006), Tourism Tasmania Tasmanian Visitor Survey—personal communications (2006, 2007).

In 2005–06, a full price sea package during the peak season was \$519 one-way, net of the rebate and including meals. For a return journey and typical fourteen night stay with a \$22 per day spend on transport, this gives a total peak season cost for motor vehicle sea passengers of \$1346.¹¹

Without the rebate the cost of the peak season sea package would have increased by \$300 to \$1646—in this example the rebate has reduced the cost of a peak season sea package by 22.3 per cent. If this were assumed to be a seven night stay, equivalent to the average air passenger stay, then the cost of the seven night peak season sea package would have been \$1192 (\$1492 without the rebate).

During TT-Line's peak season for travel, a fly-drive package at the end of December 2005 would have cost \$1805 for a typical seven night stay and a full economy air fare, or \$1000 with a best discount internet fare. If this was assumed to be a fourteen night stay—equivalent to the average sea passenger stay—then the cost of the fly-drive package with a best discount air fare would have been \$1448.

¹¹ \$22 per day spend on transport sourced from Tourism Tasmania survey. Total ignores costs associated with car ownership such as depreciation and maintenance.

During the off-peak season—1 May to 31 August—the package sea fare, including the passenger fare, vehicle fare (net of the rebate) and meals, would have been \$463 one-way. For a return journey and average fourteen night stay with a \$22 per day spend on transport, the off-peak cost for the motor vehicle sea package would have been \$1234. Without the Scheme, the cost of the off-peak sea package would have increased by \$300 to \$1534—the rebate in this example has reduced the cost of an off-peak sea package by 24.3 per cent.

If this was assumed to be a seven night stay, then the cost of the seven night off-peak season sea package would have been \$1080 (\$1380 without the rebate).

For the full economy air fares as at the end of July 2006, the total cost of a seven night fly-drive package would be \$1904. Assuming a best discount internet discount fare for July 2006 and a seven night stay, the cost of a fly-drive package was \$1000. For the internet discount fares and a fourteen night stay, the cost of an off-peak fly-drive package would be \$1448.

In 2004–05, the off-peak fifteen day sea package was only marginally (\$29) cheaper than the off-peak fifteen day air package. During 2005–06 the off-peak fourteen night sea package was \$214 cheaper than the corresponding air package.

This comparison is a very simplified look at the differences between transport costs for air and sea travel, and therefore needs to be treated with caution—particularly given the variability of discount air fares.

With these provisos, the comparison of package fares indicates sea travel was likely to have been a better option for those planning a longer (fourteen day) stay for all seasons. For those planning a shorter (seven night) stay, the fly-drive scenario with a heavily discounted airfare—subject to availability—may have been the best deal in the peak and off-peak seasons.

Summary

- TT-Line increased Melbourne–Devonport Tertiary student passenger fares by making them equivalent to a full standard adult fare.
- TT-Line increased Sydney–Devonport Tertiary student passenger fares by making them equivalent to a full standard adult fare.
- TT-Line made no change to vehicle fares on both the Melbourne and Sydney routes in 2005–06. Fares for an eligible standard vehicle for both routes stayed at \$59 one-way all year round.
- Falls in discount air fares between Tasmania and the mainland reversed in 2005–06. In previous years discount air fares have driven rapid growth in air passengers between the mainland and Tasmania.
- A comparison of package fares indicates sea travel was likely to have been a better option for those planning a longer (fourteen night) stay for all periods. For those planning a shorter (seven night) stay the fly-drive scenario with a heavily discounted airfare—subject to availability—may have been the best deal in peak and off-peak seasons.
- This comparison is a very simplified look at the differences between transport costs for air and sea travel, and therefore needs to be treated with caution—particularly given the variability of discount air fares.

Chapter 5 Impact of the Scheme on traffic

Why develop econometric models?

The rebate substantially reduces the cost of freighting an accompanying vehicle for eligible passengers. In 2005–06, the \$150 rebate on a standard car represented 22.4 per cent of the Bureau's benchmark one-way Melbourne–Devonport sea fare for a couple travelling with an eligible passenger car.¹²

The reductions in vehicle fares associated with the Scheme would be expected to stimulate increased sea travel across Bass Strait. Lower fares would potentially attract new travellers as well as travellers from other markets—including other destinations in Australia. Lower vehicle sea fares may also encourage some travellers, notably fly-drive tourists, to switch from air to sea transport. It would also be expected that some berth only sea passengers may choose to travel with their motor vehicle rather than hire a car.

Some of these factors are evident in the traffic trend comparisons. However, changes in the number of sea travellers since the introduction of the Scheme also reflect other factors such as population changes and income growth. The Bureau has therefore constructed econometric models to help identify the impact of the Scheme on the number of motor vehicle sea passengers and the number of air passengers.

Econometric model for sea travel

The econometric model used to assess the impact of the Scheme was initially developed using time-series data from 1985–86 to 2000–01. This model estimated the relationship between the number of motor vehicle passengers—that is, sea passengers with an accompanying motor vehicle—and changes in population, real household disposable income, the sea package fare and the full economy air fare.

The Bureau re-specified the model for the 2002–03 report to take account of the substantial increases in capacity following the introduction of TT-Line's new ships in September 2002. The introduction of the Sydney service in January 2004 complicated the modelling task. Several years of data would have been needed before it would have been possible to produce reliable estimates of the impact of the Scheme for the Sydney–Devonport route.

The estimates presented in this Chapter are for the Melbourne–Devonport route only. Appendix B outlines the model and data, and discusses issues related to the modelling of the sea service.

Construction of the sea model

The sea model used in this monitoring report is the same model used in the previous three reviews. The model estimates the relationship between the number of motor vehicle passengers and changes in population, real household disposable income, the sea package fare and the air fare.

The model includes three dummy variables; the first to account for the influence of the 1991–92 Gulf War, the second to account for the increase in capacity resulting from the introduction

¹² The \$150 vehicle rebate makes up 22.4 per cent of the \$669 full benchmark sea package fare as at the end of June 2006.

of the *Spirit of Tasmania I and II* from September 2002, and the third to account for changes in 2004–05 including the introduction of the Sydney service.

The Bureau has used the sea fare (own-price) elasticity from the re-estimated model to calculate the net impact of the Scheme on one-way motor vehicle passenger numbers.

Results for the Melbourne–Devonport sea model

Table 5.1 presents BTRE estimates of the Scheme's impact on the number of one-way trips by motor vehicle passengers based on a re-estimated model—this produces marginally increased estimates of the number of motor vehicle passenger trips for previous years. For 2004–05 the estimate has increased from 66 139 to 66 890 (BTRE 2006b; Table 5.1).

The estimated sea fare (own-price) elasticity of -1.07 obtained from the model indicates that a 1 per cent reduction in the sea fare leads to a 1.07 per cent increase in the number of one-way motor vehicle passengers (Table B.2). This is slightly higher than the sea fare elasticity estimate in the 2004–05 version (1.06) of the model (BTRE 2006b).

Table 5.1 Impact of the Bass Strait Passenger Vehicle Equalisation Scheme on Melbourne–Devonport motor vehicle passenger numbers, one-way trips, 1996–97 to 2005–06

<i>Motor vehicle passenger one-way trips</i>				
<i>Year</i>	<i>Without Scheme (estimates)^c</i>	<i>With Scheme (actual)</i>	<i>Difference^c</i>	<i>Per cent change</i>
1996–97 ^a	116 056	153 045	36 989	31.9
1997–98	176 555	231 098	54 543	30.9
1998–99	201 615	261 487	59 872	29.7
1999–00	192 589	248 745	56 156	29.2
2000–01	206 308	259 438	53 130	25.8
2001–02	217 031	272 922	55 891	25.8
2002–03	346 339	432 498	86 159	24.9
2003–04 ^b	328 807	409 115	80 308	24.4
2004–05 ^b	276 362	343 252	66 890	24.2
2005–06 ^b	251 739	312 304	60 565	24.1
All years	1 785 300	2 268 348	483 048	27.1

a. Data cover ten months only in 1996–97 as the Scheme commenced on 1 September 1996. Actual traffic (that is with the Scheme) in the full year 1996–97 was 167 788 persons.

b. Data for 2003–04, 2004–05 and 2005–06 excludes the Sydney–Devonport route.

c. Estimated values which may vary to previous values reported in earlier reports as the most up-to-date data is used for each subsequent year.

Sources TT-Line data and BTRE analysis.

On the basis of this own-price elasticity, the Bureau estimates that in 2005–06 the Scheme resulted in approximately 60 500 additional one-way trips by motor vehicle passengers between Melbourne and Devonport—an increase of 24.1 per cent relative to the likely situation without the Scheme (Table 5.1). This is 6000 less (11 per cent) than the revised¹³ estimate of approximately 66 800 additional one-way passenger trips for 2004–05.

This lower result for 2005–06 compares with traffic data (Table 5.1) showing 30 948 fewer one-way motor vehicle passenger trips between Melbourne and Devonport.

¹³ The 2004–05 monitoring report (BTRE 2006) had estimated there were approximately 74 000 additional one-way passengers resulting from the Scheme.

As can be seen from Table 5.1, the number of one-way motor vehicle passengers attributable to the Scheme increased until 1998–99, then ranged between an estimated 53 000 to 56 000 motor vehicle passengers per annum until September 2002.

Following the September 2002 changes to the service and rebate structure, the number of one-way trips by motor vehicle passengers increased by an estimated 86 000 in 2002–03. This declined to approximately 80 000 in 2003–04 and 67 000 in 2004–05 and 60 500 in 2005–06. The substantial increase in passenger numbers from 2002–03 (Table 5.1) is due to September 2002 changes that:

- Increased TT-Line capacity. The *Spirit of Tasmania I/II* together provided more than twice the passenger capacity and over three times the car capacity of the *Spirit of Tasmania*¹⁴; and
- Extended eligibility for the rebate to more vehicle types and increased the off-peak and shoulder season rebates.

The (revised) proportion of motor vehicle passengers attributed to the Scheme has declined from 31.9 per cent of Melbourne–Devonport motor vehicle passengers in 1996–97 when the Scheme was introduced to 24.1 per cent in 2005–06.

The model results for 2005–06 indicate that the overall impact of the Scheme continued to gradually decline as a proportion of total motor vehicle sea passengers on the Melbourne–Devonport route (Table 5.1).

Reliability of the estimates

The econometric model for Melbourne–Devonport performs well in terms of standard statistical tests. The variables included in the model explain 95 per cent of the variation in motor vehicle passenger numbers on the Bass Strait route between Melbourne and Devonport over the period 1985–86 to 2005–06. In addition, all of the estimated coefficients are significant and of the expected sign.

The Gulf War dummy variable in the 2005–06 model was significant at the 20 per cent level. This variable was retained as it is considered important to the model specification—the first Gulf War (1991–92) was associated with a short term reduction in sea passenger numbers on the route—and improved the overall explanatory power of the model.

As the model is affected by data limitations, detailed analysis should be interpreted with caution.¹⁵ For example, it uses annual data, covers a relatively short time period, and does not include some potentially relevant variables. Despite these limitations, the results provide empirical support for the view that the Scheme has contributed to increased sea passenger travel between Melbourne and Devonport.

Trend Comparisons

In addition to econometric modelling, the Bureau has compared trends in passenger traffic receiving a subsidy under the Scheme with traffic not covered by the Scheme.

Trends in tourist traffic

One of the expectations of the Scheme was that it would benefit the Tasmanian tourist industry (Sharp 1996, p. 1).

¹⁴ For an in-depth analysis of the effects these changes made in 2002–03 refer to the Bass Strait Passenger Vehicle Equalisation Scheme—BTRE Monitoring Report No. 7 2002-03 (BTRE 2004).

¹⁵ For example, prior to 2002–03 the model's sea fare (own-price) variable included peak-period fares only—that is it did not incorporate the higher or lower off-peak and shoulder rebates. The model may therefore have under or over estimated the impact of the Scheme in those years.

Table 5.2 Estimated number of adult visitors travelling to Tasmania, by purpose and mode, 1996–97 to 2005–06^{a,b}

Purpose/mode	Visitor numbers ('000)									
	96–97	97–98	98–99	99–00	00–01	01–02	02–03	03–04	04–05	05–06
<i>Holiday or leisure</i>										
Sea	49.5	71.7	85.2	86.0	77.9	79.1	120.2	120.1	102.7	102.4
Air	171.8	187.5	191.3	204.5	192.9	180.2	222.7	271.4	267.1	285.2
<i>Visiting friends and relatives</i>										
Sea	12.8	16.2	18.3	17.5	17.2	17.6	33.7	22.7	18.6	16.1
Air	113.5	102.1	106.9	95.8	114.7	102.7	113.6	149.0	172.9	212.5
<i>Business</i>										
Sea	4.0	4.1	4.9	4.8	5.2	5.5	13.3	15.5	14.6	11.3
Air	75.8	71.4	70.3	80.3	63.8	85.3	96.9	103.3	122.2	123.0
<i>Other^c</i>										
Sea	7.3	4.4	5.5	3.9	9.2	8.4	11.5	7.7	10.4	11.1
Air	47.9	43.6	41.3	38.8	39.0	40.6	39.8	49.7	49.1	51.1
<i>Total</i>										
Sea	73.9	96.6	114.1	112.2	109.7	110.8	179.0	166.2	146.3	140.8
Air	409.2	404.8	409.8	419.4	410.5	409.0	473.2	573.5	611.2	671.7

Note Data collected by survey and subject to sampling error.

a. Excludes minors and day trippers.

b. Includes passengers on the Sydney–Devonport services from 13 January 2004.

c. Includes attendance at conferences, other purposes and not specified.

Sources Tourism Tasmania 'Tasmanian Visitor Survey'—personal communications (2001; 2006).

Table 5.2 presents data on the number of adult¹⁶ visitors to Tasmania (return trips), by purpose of travel and mode, over the ten years to 2005–06 and includes sea passengers on the Sydney–Devonport service.

Table 5.2 shows that in 2005–06 the estimated number of adult visitors travelling by sea—berth only and motor vehicle passengers—declined almost 6000 to 140 800 (3.8 per cent) compared to a decline of 20 000 in 2004–05. Tourism of Tasmania survey data indicates that the number of adult sea passengers peaked at approximately 179 000 in 2002–03.

The number of tourists—visitors with holiday or leisure journey purposes—travelling by sea remained relatively stable with a slight decline of approximately 300 passengers in 2005–06, compared to a decline of 17 500 in 2004–05.

As for 2004–05, the largest percentage fall (13.4 per cent) was in the visiting friends and relatives category.

For the same 12 month period, the total number of adult air passengers increased by more than 60 000 (9.9 per cent)—this represents a return to the growth rates recorded in 2002–03 and 2003–04. The main categories of growth were the visiting friends and relatives and holidays or leisure categories.

The growth of air passengers travelling for holidays or leisure also increased by more than 18 000, reversing the decline seen in 2004–05.

¹⁶ Tourism Tasmania visitor data are for adult visitors only, and are not directly comparable with TT-Line data which are expressed in terms of one-way trips and include children.

Trends in other passenger categories

The estimated number of adult visitors who visited friends and relatives in 2005–06 by sea decreased significantly while the number travelling by air increased substantially.

This outcome for 2005–06 and 2004–05 contrasts with the trend evident since the start of the Scheme—the number of adult sea passengers visiting friends and relatives has increased by approximately 3300 (26 per cent) between 1996–97 and 2005–06 while the number of air passengers in this category has increased by 99 000 (87 per cent).

As noted in Chapter 2, in 2005–06 the number of visitors travelling for holiday or leisure purposes increased slightly for air and stayed relatively stable for sea, indicating a possible turn-around in the downturn in tourist numbers to Tasmania seen in 2004–05.

Trends in sea passenger categories

Figure 5.1 presents data on the number of motor vehicle sea passengers and berth only sea passengers since 1995–96 (one-way trips)—including passengers on the Sydney–Devonport service since 2003–04. The average number of motor vehicle passengers per eligible vehicle has remained around 2.0 since the introduction of the Scheme, with changes in the number of motor vehicle passengers mirroring changes in the number of eligible vehicles.

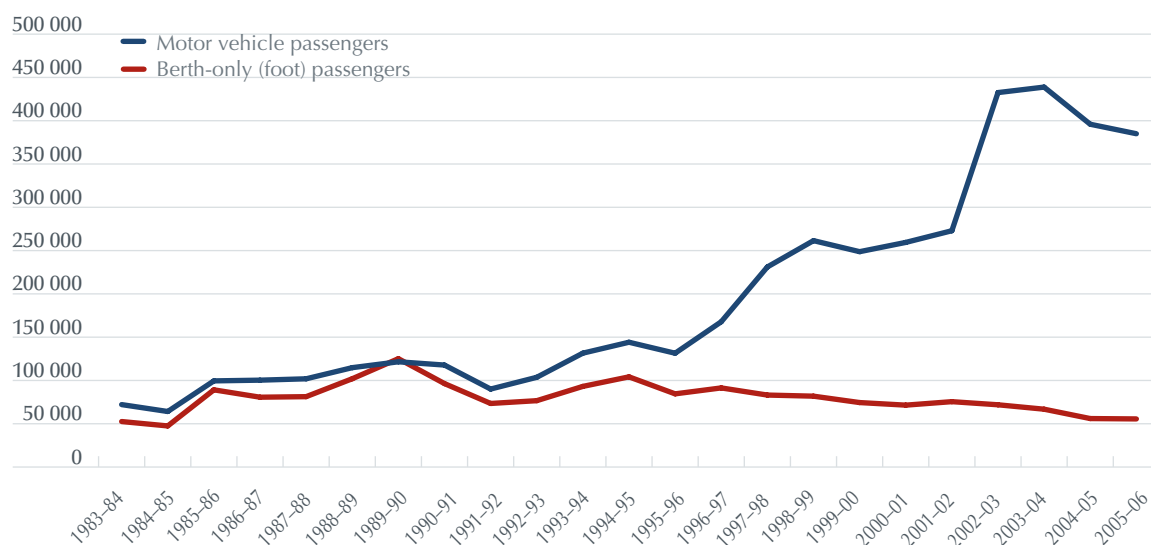
The number of motor vehicle passengers since the start of the Scheme has generally risen while the number of berth only passengers has generally declined. Motor vehicle passenger traffic rose by 192 per cent between 1995–96 and 2005–06, while berth only passenger traffic fell by 34 per cent. There are two exceptions to the upward trend in motor vehicle passenger numbers since the start of the Scheme:

- In 1999–00, the number of motor vehicle passengers fell 5 per cent—this was associated with engine problems on the Spirit of Tasmania.
- In 2004–05 and again in 2005–06, the number of motor vehicle passengers fell 9.8 per cent and 2.7 per cent respectively.¹⁷

Figure 5.1 shows a very large increase in the total number of passengers (155 915) carried by TT-Line in 2002–03 compared to the previous year—associated with the introduction of the new ships. This net increase in 155 915 passengers was due to an increase of 159 576 in the number of motor vehicle passengers, while the number of berth only passengers fell by 3661.

Since the Scheme started in 1995–96 the number of motor vehicle passengers—who may be eligible—has generally risen while the number of berth only passengers—not covered by the Scheme—has generally declined. This indicates that the Scheme has encouraged substitution between these types of sea travel—that is, it has encouraged sea passengers to take their own motor vehicle.

¹⁷ Over the two years total sea passengers decreased by 65 091 (12.8 per cent). While the number of motor vehicle passengers fell 53 867 (12.3 per cent), the number of berth only passengers also continued to decline—down 11 224 (16.8 per cent).

Figure 5.1 Number of sea passengers^{a,b} carried across Bass Strait, one-way trips, 1995–96 to 2005–06

a. Includes both visitors and Tasmanian residents.

b. Data for 2003–04, 2004–05 and 2005–06 includes the Sydney–Devonport service.

Source TT-Line—personal communications 2006 and earlier.

Types of eligible vehicles

A breakdown of eligible vehicles for which reimbursements were paid from 2001–02 to 2005–06 (Table 5.3) shows cars have declined as a proportion of all eligible vehicles since the Scheme was broadened in September 2002. Other vehicle types increased from 5 per cent of all eligible vehicles in 2001–02 to 15 per cent in 2005–06.

Table 5.3 Eligible vehicles for which reimbursements paid, 2001–02 to 2005–06

Eligible Vehicles	Number of Eligible Vehicles					Change from 04–05 to 05–06
	01–02	02–03	03–04	04–05	05–06	
Motor cars	128 353	196 871	199 902	188 757	179 955	-4.7
Eligible vehicles+caravan	0	7 359	9 648	10 186	10 798	6.0
Motorcycles	6 303	7 023	8 699	8 791	11 402	29.7
Motor homes	0	5 991	9 023	7 870	7 891	0.3
Pushbikes	0	1 188	431	992	692	-30.2
Buses	324	474	791	365	370	1.4
Total	134 980	218 906	228 494	216 961	211 108	-2.7

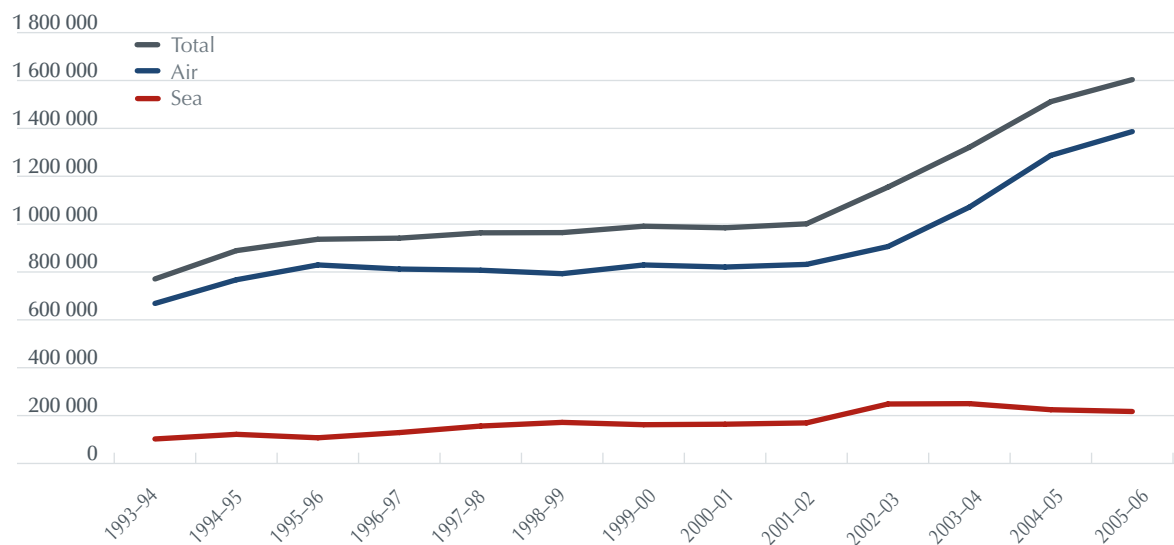
Sources Tasmanian Assistance Services—personal communications 2003–2006.

Air and sea traffic trends

Figure 5.2 shows the number of sea passengers—who are mainly covered by the Scheme—and air passengers carried between the mainland and Tasmania since 1993–94. Up to 1995–96, air traffic grew strongly while sea traffic increased slightly.

The Scheme applied to travel from 1 September 1996. In the period from 1995–96 to 1998–99, sea traffic grew 60 per cent while air traffic declined 4 per cent.

Figure 5.2 Sea and air passengers carried across Bass Strait, return journeys, 1993–94 to 2005–06



Note Data includes day trippers and minors.

Source Tourism Tasmania Tasmanian Visitor Survey—personal communications.

Over the period from 1998–99 to 2001–02 there was a decline in sea traffic of 1 per cent—at least partly due to the breakdown of the *Spirit of Tasmania*—while air traffic increased by 5 per cent. From 2001–02 to 2002–03, sea traffic grew 47 per cent and air traffic 9 per cent—reflecting in large part the introduction of the new *Spirit of Tasmania I and II* in September 2002.

Between 2002–03 and 2003–04 this growth pattern reversed. The number of air passengers grew by 18 per cent while sea passenger numbers grew less than 1 per cent—despite the Sydney–Devonport service which started in January 2004.

In 2004–05 air passenger numbers continued to grow whereas sea passenger numbers declined. This reduction in the number of sea passengers was associated with significant falls in discount air fares. This trend continued in 2005–06 with growth in air passenger numbers and a decline in sea passenger numbers.

The period since 2002 has seen major changes in both the air market (entry and expansion of both Virgin Blue and Jetstar) and sea market (the replacement of the *Spirit of Tasmania* with the *Spirit of Tasmania I and II* in September 2002, the introduction of the Sydney–Devonport service in January 2004 and subsequent cessation in August 2006).

Overall, traffic trends since 1996 indicate that the Scheme has contributed to the number of motor vehicle passengers.

Assessing the impact of the scheme on tourism

When the Scheme was introduced in 1996, the tourism industry was cited as an area where there would be direct benefits of increased demand for sea travel (Chapter 1). The number of new leisure or holiday visitors who travelled because of the rebate, and their additional spending in Tasmania, is an important—albeit partial—indicator of the impact of the Scheme.

The number of motor vehicle passengers has grown substantially since 1996. Other trends indicate that some of this growth has been at the expense of other travel demands—notably the continued decline in berth only passengers, but also potentially reduced air traffic demand.

While lower sea fares may have had an impact on some categories of air travel, the Bureau has not adjusted for any reduction in air travel demand as the econometric modelling of the Melbourne–Tasmania air market found no statistically significant relationship between air demand and the price of sea travel (BTRE 2006b, Appendix C).¹⁸

Berth only passenger numbers have declined since the introduction of the Scheme in 1996. Before the introduction of the Scheme the ratio of berth only to total passengers remained fairly steady, with a small peak in 1989–90 at the time of the pilots dispute. The trend over the next five years was for a steady overall growth in the number of berth only passengers. Extrapolating this growth trend from 1996 (to provide an indicative estimate of the number of berth only passengers that may have travelled without the Scheme) indicates that the rebate may have reduced the number of berth only sea passenger movements by approximately 43 000 in 2005–06.

Assuming the Scheme resulted in these berth only sea passengers choosing to become motor vehicle sea passengers, we subtract this estimate of 43 000 fewer berth only passenger movements from the Bureau's econometric estimate of just over 60 500 additional motor vehicle passenger movements. The assumption is that 43 000 of the additional 60 500 motor vehicle sea passengers would have travelled anyway as berth-only sea passengers and that the Scheme may have resulted in the difference, namely a 17 500 net increase in one-way sea passengers between Melbourne and Devonport in 2005–06. Assuming each passenger made a return trip with their vehicle, this equates to 8750 return motor vehicle passengers.

Tourism Tasmania visitor survey data indicates that approximately half of these new passengers are likely to have been tourists—visitors to Tasmania travelling for holiday or leisure purposes (Table 2.1).¹⁹

The indicative number of new leisure visitors who travelled by sea between Melbourne and Devonport is estimated at approximately 4375. If these new visitors spent an average of \$2146 per person,²⁰ then the total additional new tourism spending would have been \$9.4 million. It is important to note that this estimate is indicative as it is derived by extrapolating pre-Scheme trends in the number of berth only passengers on the Melbourne–Devonport service only. Further, it does not include:

- benefits to Tasmanian residents who travelled by sea who may have been eligible, or benefits to eligible visitors travelling for non-leisure purposes;
- benefits to passengers using the Sydney–Devonport ferry service;
- any incremental spending related to longer stays by berth only visitors who decide to take a car, or by visitors switching from air to sea transport who decide to stay longer in Tasmania as a result.

Given an average spend of \$2146, the Scheme would need to have increased the number of additional visitors to Tasmania by 14 600 in 2005–06 for the increase in new leisure visitor spending to equal the total rebate paid.

¹⁸ Possible explanations include data limitations and limited substitutability of sea travel for most air passengers.

¹⁹ That is, sea passenger numbers minus the estimated number of Tasmanian residents and visitors travelling for non-leisure reasons (including visiting friends/relatives and business reasons).

²⁰ The average spending by sea passengers (for all journey purposes) was \$2146 per trip in 2005–06 (Tourism Tasmania, personal communication 2007).

Summary

- The rebate reduces the cost of freighting an accompanying vehicle for eligible passengers. In 2005–06, the \$150 rebate on a standard car represented 22.4 per cent of the Bureau’s benchmark one-way Melbourne–Devonport sea fare for a couple travelling with an eligible passenger car.
- The Bureau’s econometric modelling indicates the Scheme increased one-way motor vehicle passenger numbers between Melbourne and Devonport by an estimated 60 500 additional one-way trips in 2005–06. This was approximately 6 000 fewer extra one-way motor vehicle passengers than (revised) 2004–05 estimates.
- The proportion of Melbourne–Devonport motor vehicle passengers attributed to the Scheme was 24.1 per cent in 2005–06—down from 31.9 per cent of motor vehicle passengers when the Scheme was introduced in 1996–97.
- In 2005–06, total sea passengers between the mainland and Tasmania declined while total air passengers continued to grow.
- Since the start of the Scheme the number of motor vehicle passengers has generally risen while the number of berth only passengers—who are not covered by the Scheme—has generally declined.
- Traffic trends since 1996 indicate that the Scheme has contributed to the number of motor vehicle passengers, and encouraged former berth-only sea passengers to take their own motor vehicle.
- The Bureau’s indicative estimate of the number of new leisure visitors who travelled by sea from Melbourne in 2005–06 as a result of the Scheme is approximately 4375. If each new leisure visitor spent an average \$2146 then the additional new tourism spending would have been \$9.4 million in 2005–06.

Chapter 6 Operator revenue and expenses

The Ministerial Directions require the Bureau's annual monitoring report to have specific regard to service operators' financial performance. This chapter focuses on TT-Line, which accounts for over 99 per cent of payments under the Scheme.

TT-Line performance in 2005–06

TT-Line reported a net profit of \$7.1 million in 2005–06. This net profit was due to ship revaluations²¹ that reflected exchange rate movements rather than a fundamental change in operating conditions.

After adjusting for ship revaluations, the underlying operating loss for 2005–06 was \$33.5 million, of which \$27.7 million was attributable to the *Spirit of Tasmania III* (TT-Line 2006c, p. 4). This was a reduction of \$2.5 million compared with the 2004–05 adjusted operating loss of \$36 million.

Total passenger and vehicle numbers fell in 2005–06 (see Chapter 2). According to TT-Line the factors having an impact in 2005–06 on reduced passenger numbers were the popularity of budget air travel to and from Tasmania coupled with fuel price increases and renewed interest by Australians in international holidays (TT-Line 2006c, p. 4).

TT-Line operating revenues were \$158.88 million in 2005–06, up \$2.2 million (1.9 per cent) (Table 6.1). Adjusted operating expenses were \$192.3 million, up \$1.4 million (0.7 per cent). Significant changes in operating expenses in 2005–06 included:

- General expenses—down 24.4 per cent (–\$3.9 million); and
- Customer acquisition costs—up 22.8 per cent (+\$3 million).

The Tasmanian Government injected an additional²² \$62.5 million into TT-Line in 2005–06 to make debt repayments/reductions (\$39 million) and fund capital projects (\$3.7 million), with the balance to fund operational requirements (TT-Line 2006c, p. 16).

On 5 June 2006, the Tasmanian Government decided to sell the *Spirit of Tasmania III* and cease the Sydney service (TT-Line 2006a). The ferry was subsequently sold to Corsica Ferries for \$111.475 million, recouping all acquisition costs (TT-Line 2006b). *Spirit of Tasmania III* carried more than 175 000 passengers over 2.5 years, with the final service departing Sydney on 27 August 2006 (TT-Line 2006c). TT-Line's stated focus for 2006–07 is to control costs and increase passenger numbers on the Melbourne-Devonport service (TT-Line 2006c, p. 5).

The BTRE notes that there has been significant variability in TT-Line's profitability over the last nine years (Table 6.1), volatility that has been exacerbated by the 2004–05 change in ship valuation method.

²¹ The appreciation in ship values was allocated to the company Income Statement and asset revaluation reserve in accordance with AASB 116 (TT-Line 2006d).

²² In addition to the \$75.2 million capital injection in 2004–2005.

Table 6.1 Selected financial information for TT-Line, 1996–97 to 2005–06 (\$ '000)

Category	96–97	97–98	98–99	99–00	00–01	01–02	02–03	03–04	04–05	05–06
Total operating revenue	61 766	73 325 ^a	80 607	77 511	81 842	86 236	195 518 ^b	154 250	154 874	158 882
Operating expenses										
Operations—general	22 357	22 724 ^a	33 932	40 865	42 864	42 402	69 454	90 900	118 603	120 798
Operations—write down	0	0	0	0	0	30 887	0	0	43 237 ^c	-43 237 ^d
Ship sale carrying value	0	0	0	0	0	0	62 732	0	0	0
Hotel services	15 296	15 464	17 783	16 924	17 782	18 130	27 708	33 878	34 306	34 575
Customer acquisition	4 893	4 698	6 015	5 900	6 261	6 680	11 437	10 574	13 222	16 234
Administration	6 098	6 219	5 707	4 889	6 871	7 462	8 902	8 340	8 593	8 478
Other	10 556	22 406	9 793	8 697	2 696	1 958	12 673	13 954	16 192	12 245
Total operating expenses	59 200	71 511	73 230	77 275	76 474	107 519	192 906	157 646	234 153	149 093
Operating profit/loss	2 566	1 814	7 377	236	5 368	-21 283	2 612	-3 396	-79 279	9 789
Abnormals/extraordinaries	0	780	0	0	0	0	0	0	0	0
Profit/loss	2 566	1 034	7 377	236	5 368	-21 283	2 612	-3 396	-79 279	9 789

a. Ferry revenue and operations-general expenses in 1997–98 include the impact of the Devil Cat/catamaran trial.

b. Total operating revenue in 2002–03 included gross proceeds of \$61.2 million from the sale of the Spirit of Tasmania.

c. The 2004–05 write down in ship values reflected the change from a 'cost' to a 'valuation' accounting method.

d. In 2005–06, the ships were re-valued based on market values for similar vessels in Europe—the major market for this type of roll-on roll-off ferry—and converted from Euros to Australian dollars using the exchange rates as at 30 June 2006. TT-Line (2006d, pp 1–2) states that—while the underlying value of the ships did not change—the translation into Australian dollars increased the value of the ships in the company accounts.

Source TT-Line (2006c) and previous Annual Reports; TT-Line (2006d, pp 1–2). TT-Line (personal communication January 2001).

Financial indicators

Table 6.2 presents a series of selected TT-Line financial indicators adjusted for ship write downs and revaluations.

Table 6.2 Financial indicators (adjusted) for TT-Line, 1996–97 to 2005–06

Indicator	96–97	97–98	98–99	99–00	00–01	01–02	02–03	03–04	04–05	05–06
Operating revenue per voyage ^a	197 335	166 648	159 618	170 354	171 218	177 806	158 710 ^c	149 903	147 219	156 380
Operating expenses ^b										
– per passenger	228	228	213	239	231	220 ^d	258 ^d	312	422 ^e	437 ^f
– per voyage	189 137	162 525	145 010	169 835	159 987	158 004 ^d	153 870 ^d	153 203	181 479 ^e	189 301 ^f

a. Total revenue divided by the number of voyages.

b. Incorporates expenses for passengers, vehicles and freight.

c. Revenue adjusted to exclude gross proceeds from the sale of Spirit of Tasmania in 2002–03.

d. Expenses adjusted to exclude write-down in carrying value of Spirit of Tasmania in 2001–02 and carrying value of this ship in 2002–03.

e. Expenses adjusted to exclude write-down of \$43.24 million in the total value of all three ships.

f. Expenses adjusted to exclude asset revaluation of \$43.2 million.

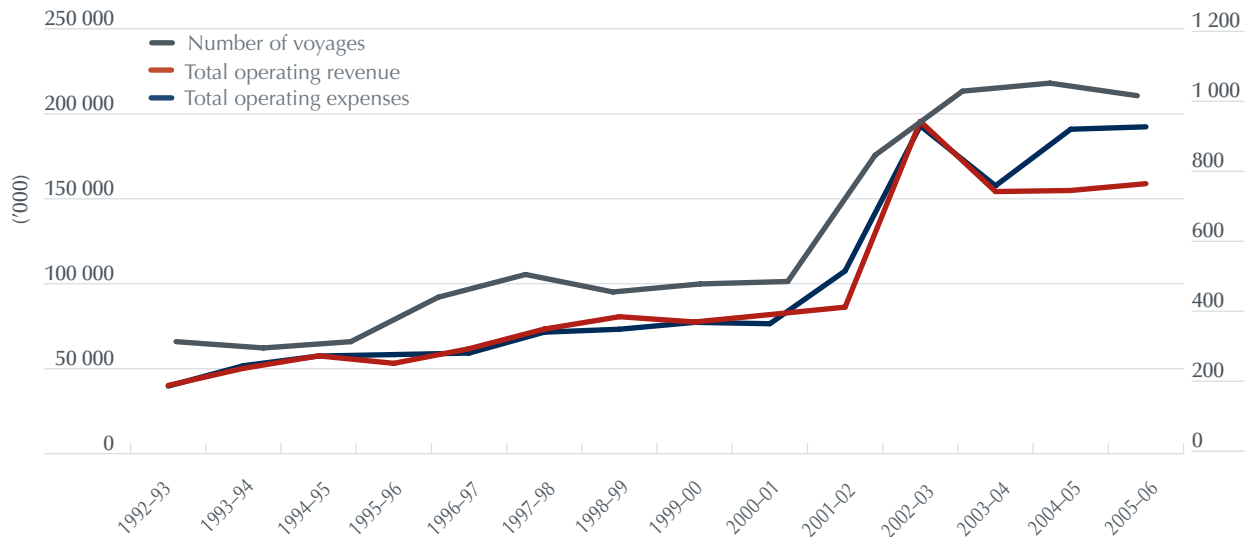
Source TT-Line (2006c) and previous Annual Reports; BTRE estimates.

After adjusting for capital items:

- Average revenue per voyage has risen after three consecutive years of falls.
- (Adjusted) average voyage operating expenses in 2005–06 increased by 4.3 per cent. This followed a 16.5 per cent increase in 2004–05.
- The average (adjusted) cost per passenger has increased since 2001–02.

Figure 6.1 shows the gap between operating revenue and operating costs and the decreasing number of TT-Line voyages (excluding the \$43.2 million write down in ship values in 2004–05 and the 2005–06 asset revaluation).

Figure 6.1 TT-Line operating revenue, expenses and number of voyages



Note: 2004–05 operating expenses exclude asset devaluation, and 2005–06 operating expense excludes asset revaluation.
Source: TT-Line (2006c) and previous Annual Reports.

Table 6.3 shows reimbursements to TT-Line and their operating revenue.

Reimbursements had generally increased from \$8.47 million (17.6 per cent of revenue) in 1997–98 (the first full year of application) to a peak of \$34.24 million (22.2 per cent of revenue) in 2003–04, before declining to \$31.3 million in 2005–06 (Figure 6.2). This decline in 2005–06 was largely due to the fall in eligible vehicle numbers.

However, rebates as a proportion of total TT-Line revenue had reached a peak of 23.7 per cent in 2002–03. In 2005–06, reimbursements declined as a proportion of TT-Line operating revenue to 19.7 per cent, the third successive decline since 2002–03. This may in part reflect the higher passenger fares on the Sydney–Devonport service—given that the standard rebate of \$150 applies to both routes—effectively diluting the rebate as a proportion of total TT-Line revenue.

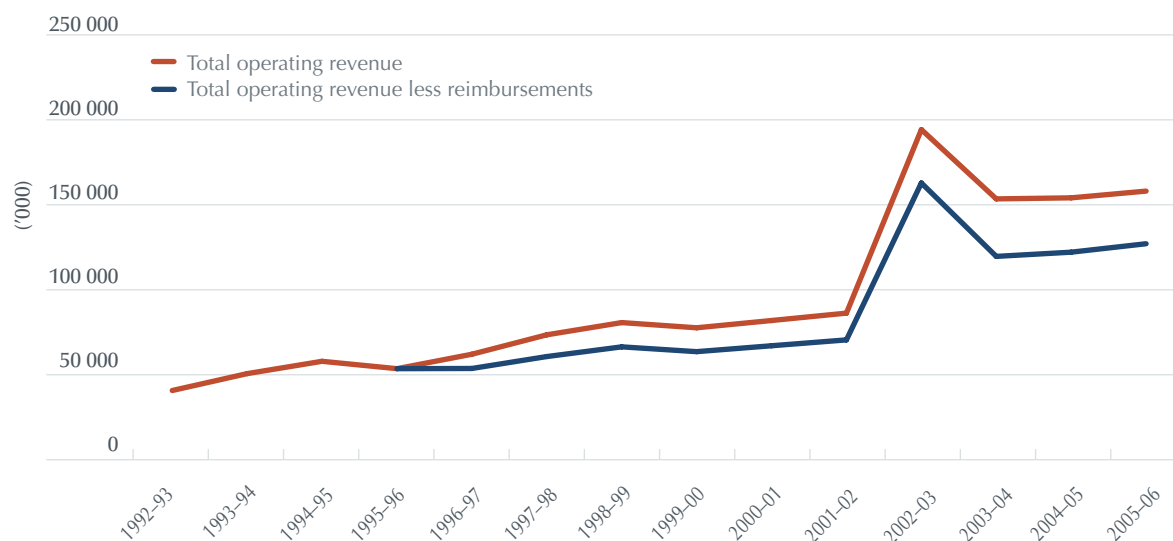
Table 6.3 TT-Line reimbursements and (adjusted) operating revenue, 1996–97 to 2005–06

Year	Reimbursements paid to TT-Line (\$)	TT-Line operating revenue (\$)	Reimbursements as a proportion of operating revenue (per cent)
1996–97	8 474 915	61 766 000	13.7
1997–98	12 938 565	73 325 000	17.6
1998–99	14 446 755	80 607 000	17.9
1999–00	14 211 445	77 511 000	18.3
2000–01	15 030 670	81 842 000	18.4
2001–02	15 932 170	86 236 000	18.5
2002–03	31 793 065	134 269 000a	23.7
2003–04	34 235 612	154 250 000	22.2
2004–05	32 349 808	154 874 000	20.9
2005–06	31 331 361	158 882 000	19.7

a. Excludes gross proceeds (\$61.2 million) from the sale of *Spirit of Tasmania* in 2002–03.

Source: TT-Line (2006c) and previous Annual Reports.

Figure 6.2 Adjusted TT-Line revenue and revenue net of scheme rebates, 1992–93 to 2005–06



Note Excludes gross proceeds (\$61.2 million) from the sale of *Spirit of Tasmania* in 2002–03.
 Source TT-Line (2006c) and previous Annual Reports.

Summary

- The Tasmanian Government decided on 5 June 2006 to sell the *Spirit of Tasmania III* and cease the Sydney service.
- TT-Line reported a net profit of \$7.1 million in 2005–06.
- The net profit was due to ship revaluations that reflected exchange rate movements rather than a fundamental change in operating conditions.
- TT-Line's underlying operating loss for 2005–06 was \$33.5 million—of which \$27.7 million was attributable to the *Spirit of Tasmania III*—a reduction in the 2004–05 operating loss of \$36 million.
- Operating revenues were \$158.88 million, up \$2.2 million (1.9 per cent). Adjusted operating expenses were \$192.3 million, up \$1.4 million (0.7 per cent).
- Average revenue per voyage has risen after three consecutive declines and the average (adjusted) cost per passenger has increased. (Adjusted) average voyage operating expenses in 2005–06 increased by 4.3 per cent.
- The Tasmanian Government injected \$62.5 million into TT-Line to make debt repayments/reductions (\$39 million) and fund capital projects (\$3.7 million), with \$19.8 million assistance in funding operational requirements (TT-Line 2006c).
- In 2005–06, Scheme rebates fell to 19.7 per cent of TT-Line operating revenue—the third successive decline (partly due to the fall in passenger and eligible vehicle numbers). Reimbursements had increased from 17.6 per cent of revenue in 1997–98—the first full year of application—to a peak of 23.7 per cent of revenue in 2002–03.

Appendix A Monitoring provisions in 2002 Ministerial Directions

- 17.1 A Service Operator who claims reimbursement under the Scheme shall be subject to monitoring by the Bureau.
- 17.2 The Bureau shall, on an annual basis, monitor the effectiveness of the Scheme, with specific regard to:
- (a) movement in a Service Operator's annual operating costs;
 - (b) movement in an Operator's revenue; and
 - (c) the number of eligible passengers, eligible passenger vehicles and number of passengers travelling under related bookings, carried per annum by the Operator.
- 17.3 A Service Operator shall comply with all reasonable requests by the Bureau for information or access to documentation, in relation to the Bureau's monitoring function.

Appendix B Model of sea passenger traffic

This appendix outlines the re-estimated model that was used to assess the impact of the Scheme on the Melbourne–Devonport sea route.

The Melbourne–Devonport model

The model is specified in terms of population, income, own-price and cross-price variables in the following equation:

$$\ln V_t = \ln Y_t * \ln P_t * \ln Q_t * DGW_t * DSP_t * DSY_t * u_t$$

where

V = Per capita number of motor vehicle passenger movements;

Y = Per capita real household disposable income of motor vehicle passengers;

P = One-way package sea fare (including reductions under the Scheme from 1996–97);

Q = One-way economy air fare from Melbourne to Hobart;

DGW = Dummy Gulf War—Dummy variable to take account of the influence of the 1991–92 Gulf War on the number of motor vehicle passengers;

DSP = Dummy Spirit of Tasmania—Dummy variable to take account of the influence of an increase in the passenger capacity of TT-Line following the introduction of the *Spirit of Tasmania I/II*;

DSYD = Dummy Sydney service—A new dummy variable to account for changes in 2004–05 and 2005–06 including the new Sydney service;

u = Error term;

t = Time period.

The influence of population on the number of motor vehicle passenger movements is included by specifying the model on a per capita basis using the population of Australia. The Bureau re-estimated the model using annual time-series data from 1985–86 to 2005–06. The time-series data are contained in Table B.1.

Table B.1 Time-series data used to re-estimate the Melbourne–Devonport econometric model

Year	Motor vehicle passengers (one-way) ^a ('000)	Air Fare Index ^{b, d}	Sea Fare ^{c, d} (\$/package)	Real Income ^e (\$b)	Population ^f (million)
1985–86	99.5	40.1	291	334.1	15.7
1986–87	100.3	43.5	317	335.0	15.9
1987–88	101.9	46.2	317	341.9	16.1
1988–89	114.8	48.8	353	361.9	16.8
1989–90	121.6	53.9	390	387.1	17.1
1990–91	117.8	59.1	427	380.1	17.3
1991–92	90.1	63.2	450	381.7	17.5
1992–93	103.6	58.5	413 ^g	390.7	17.7
1993–94	131.5	63.5	413 ^g	402.9	17.9
1994–95	144.1	63.5	445	420.8	18.1
1995–96	131.5	65.7	445	436.9	18.3
1996–97	167.8	69.9	355	447.0	18.5
1997–98	231.1	73.6	371	454.1	18.7
1998–99	261.5	76.4	392	470.1	18.9
1999–00	248.7	76.9	402	489.6	19.2
2000–01	259.4	85.7	475	507.3	19.4
2001–02	272.9	93.0	475	519.3	19.7
2002–03	432.5	95.2	497	521.2	19.9
2003–04	409.1	94.5	509	550.5	20.1
2004–05	343.3	97.8	515	576.4	20.4
2005–06	312.3	100.0	519	599.0	20.7

- Notes:
- Motor vehicle passengers carried across Bass Strait between Melbourne and Devonport.
 - Average one-way economy air fare index from Melbourne to Hobart (nominal dollars).
 - Average one-way package net fare during peak season (nominal dollars). The package net fare includes two adults, two meals and a standard vehicle.
 - The air fare and sea package fare indices are in nominal rather than real dollars—this implies the expenditure on travel is not a direct substitute for other goods and services.
 - Real household disposable income of Australians at current (2005–06) prices.
 - Population of Australia.
 - The representative passenger fare declined as a meal was not included in the price of a ticket in these two years. The lower fare is used in the analysis as it is the fare on which travellers based their travel decisions.

Source TT-Line (2006c) and previous Annual Reports, TT-Line—personal communications (November 2006), ABS (2007), BTRE (2006a; 2006b).

Results of the Melbourne–Devonport sea model

The estimated regression results are presented in Table B.2. The adjusted R^2 value of 0.96 (previously 0.94) suggests that the model is a good fit. It indicates that 96 per cent of the variation in motor vehicle passenger numbers over the period is explained by the variables included in the model (population, income, sea fare, air fare, the Gulf War, the Sydney–Devonport service dummy and increased ship capacity). Around 4 per cent of the traffic variation is therefore attributable to factors not specified in the model, such as:

- Movements in \$A exchange rates (affecting relative costs of Australian overseas travel and travel by foreign tourists to Australia);
- Changes in community perceptions of Australian and overseas security risks;
- Expenditure on tourism promotion activities for Tasmania and other parts of Australia; and
- Aspects of local and overseas economic conditions such as unemployment, interest rates and fuel prices.

All of the estimated coefficients are of the expected sign and are significant. The Gulf War dummy (1991–92) variable is significant at or about the 20 per cent level. This dummy variable has been retained as (a priori) it is important—sea passenger numbers fell during the first Gulf War—and including it does improve the model.

Table B.2 Regression results for the Melbourne–Devonport sea model

Variable	Estimated Coefficient	T-Statistics
Y – Real Income	2.36	1.95
P – Sea Fare	-1.07	-3.21
Q – Full Economy Air Fare	0.96	2.11
Gulf War 1991–92 (DGW)	-0.22	-1.56
Introduction of the <i>Spirit of Tasmania</i> III 2001–02 on (DSP)	0.44	4.36
2004–05 dummy (DSYD)	-0.44	-3.45
Intercept	-17.19	-3.17
Adjusted R ²	0.96	

Source BTRE analysis.

In terms of the total impact on the number of motor vehicle passenger movements, the most important variable is per capita real household income, with an estimated elasticity of 2.4 (previously 2.6). This means that a 1 per cent increase (decrease) in the level of per capita real household income will result in a 2.4 per cent increase (decrease) in the number of motor vehicle passenger movements.

The second most important variable is the sea fare (own-price), with an estimated elasticity of -1.07 (previously -1.06). The own-price elasticity indicates that a 1 per cent decrease (increase) in the price of sea travel will result in a 1.07 per cent increase (decrease) in the number of motor vehicle passenger movements.

The coefficient of the full economy air fare variable reported in the annual model in Table B.2 is significant and of the expected sign. Full economy fares have been used because of the lack of discount fare data series (prior to October 1992). Full economy fares have increased since budget airlines entered the Tasmanian market, rather than decreased. A priori, an increase in competition would be expected to reduce air fares, thereby increasing motor vehicle passenger numbers. While discount air fares have fallen substantially, the discount air fare series is generally not significant²³ in explaining sea passenger movements.

The cross-price (air fare) elasticity is 0.96 (Table B.2)—previously 0.87. This indicates a 1 per cent increase (decrease) in the full economy air fare will result in a 0.96 per cent increase (decrease) in the number of motor vehicle passenger movements travelling by sea on the Melbourne–Devonport route.²⁴

The estimated coefficient of the dummy variable DGW indicates that the Gulf War in 1991–92 adversely affected the number of motor vehicle passengers on the Melbourne–Devonport route.

The estimated coefficient of the dummy variable DSP indicates the increased ship capacity provided by TT-Line's new ships positively affected the number of motor vehicle passengers on the Melbourne–Devonport route.

²³ As already noted, the discount air fare series is only available from October 1992. When this discount fare series was used the resulting air fare coefficient was not significant. This appears to reflect limitations in the fare data—the discount air fare series is volatile with large month to month variations, and may not capture the underlying relationships in an annual model. Consequently, the sea model reported here uses the full economy air fare series.

²⁴ For 2003–04 an econometric air model was investigated to see if there was significant passenger switching between the two modes (BTRE 2006). The analysis concluded that air travellers as a group are insensitive to changes in the sea fares. Further information on the air model can be found in *BTRE Monitoring Report No. 8, 2003–04, Appendix C*.

The dummy variable for the Sydney–Devonport service (DSYD) was significant²⁵ and negative in sign—approximately 11 000 fewer one-way motor vehicle passengers travelled in 2005–06 on the Melbourne–Devonport service. A number of factors may explain this decrease: 2004–05 saw the first full year of the new Sydney service with the number of passengers increasing during 2005–06, which would be expected to reduce passengers on the Melbourne–Devonport service. For 2005–06 the decline in the Melbourne service was close to the increase in motor vehicle passengers on the Sydney service.

The detailed results on the Melbourne–Devonport econometric model should be interpreted with some caution, as the analysis is constrained by data limitations and other factors. For example, the time-series annual data cover a period of only 19 years, with the Scheme operating for just eight of these years. In addition, the data are annual rather than monthly or quarterly, and the sea fare and air fare data are based on a specific season and ticket category.

Despite these limitations, the model provides empirical support for the view that the Scheme has contributed to the number of motor vehicle passengers travelling by sea on the Melbourne–Devonport route since 1995–96.

²⁵ Excluding the DSYD variable reduces the overall explanatory power of the model and gives an estimate for the real income variable (1.81) that is well below previous results.

References

- Australian Bureau of Statistics 2007, *Austats* – various series (<http://www.abs.gov.au/ausstats/abs@nsf/web+pages/statistics?opendocument>, accessed 17 January 2007).
- Bureau of Transport and Regional Economics 2004, *Bass Strait Passenger Vehicle Equalisation Scheme—BTRE Monitoring Report No. 7 2002-2003*.
- Bureau of Transport and Regional Economics 2006a, *Bass Strait Passenger Vehicle Equalisation Scheme—BTRE Monitoring Report No.8 2003-2004*.
- Bureau of Transport and Regional Economics 2006b, *Bass Strait Passenger Vehicle Equalisation Scheme—BTRE Monitoring Report No.9 2004-2005*.
- Department of Transport and Regional Services 2002, *Directions by The Minister For Transport and Regional Services for the operation of the Bass Strait Passenger Vehicle Equalisation Scheme*, Approved by the Minister for Transport and Regional Services 1 September (<http://www.dotars.gov.au/transport/programs/maritime/bass>, accessed 7 May 2007).
- Department of Transport and Regional Services undated, Sea programs (<http://www.dotars.gov.au/transprog/maritime/bspves.aspx>, accessed 14 December 2005).
- Jetstar 2004, Jetstar will shine brightly for Tasmanian tourism, Media Release 29 April (<http://www.jetstar.com.au/pdf/news/20040429.pdf>, accessed 15 December 2005).
- Sharp, J. 1996, *Bass Strait Passenger Vehicle Equalisation Scheme*, media statement by Minister for Transport and Regional Development, 23 August.
- Sydney Port Corporation 2004, Sydney welcomes a new dimension to the working harbour, Press Release 7 January (<http://www.sydneyports.com.au/MediaRoom/story.asp?pageid=185&pageversionid=412>, accessed 15 December 2005).
- TT-Line Company Pty Ltd 2002, Increase in security costs, December.
- TT-Line Company Pty Ltd 2003, Fare increase question and answer document, August.
- TT-Line Company Pty Ltd 2004, TT-Line Fare Changes, July.
- TT-Line Company Pty Ltd 2005a, Sydney Spirit Sails into 2005 with New Fares, January.
- TT-Line Company Pty Ltd 2005b, Spirit Fare Changes, June.
- TT-Line Company Pty Ltd 2005c, Annual Report 2004–05 (<http://www.spiritoftasmania.com.au/mediaroom/documents/annrpt0405.pdf> accessed 13 February 2006).
- TT-Line Company Pty Ltd 2006a, *Spirit III* to be sold, 5 June.
- TT-Line Company Pty Ltd 2006b, Final *Spirit of Tasmania III* sailing, 27 August 2006
- TT-Line Company Pty Ltd 2006c, Annual Report 2005–06 (<http://www.spiritoftasmania.com.au/mediaroom/documents/AnnualReport2006.pdf> accessed 1 March 2007).
- TT-Line Company Pty Ltd 2006d, Technical paper explaining accounting adjustments year ended 30 June 2006 (http://www.spiritoftasmania.com.au/mediaroom/documents/AnnualReport2006_TechPaper.pdf, accessed 1 March 2007).
- TT-Line undated, Ship facts (<http://www.spiritoftasmania.com.au/theships>, accessed 3 July 2005).
- Virgin Blue 2001, Virgin Blue fast forwards flights to Tassie direct Melbourne-Launceston Service from Nov 8, Media release 18 October (<http://www.virginblue.com.au>, accessed 15 December 2005).