

Australian Long Distance Coach Industry Review

Occasional Paper

Recent years have seen a major-increase in the level of competition within the long distance coach industry in Australia. This competition has led to a significant fall in fares and a reported growth in passenger numbers. Initial examination of information sources revealed an almost complete lack of reliable, publicly available, disaggregate data on the industry. Information used in preparation of this Paper was obtained in discussions with coach operators and State authorities, by detailed analysis of coach timetables and observations of coach occupancy. However, information on the size and income of the industry is still based on estimates rather than on any formal industry returns.

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Australian Long Distance Coach Industry Review



Bureau of Transport and Communications

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ISSN 0157-7085
ISBN 0 644 04439 X

FOREWORD

In recent times the long distance coach industry in Australia has undergone considerable change. A number of new companies have entered the market, fares have fallen sharply and there has been rapid growth in patronage. The industry is now a major competitor for non-business, interstate travel.

In spite of this growth, little data on the industry had been published and no comprehensive analysis had been undertaken. In light of this, the Bureau of Transport Economics (BTE) decided to carry out a review of the industry and this Paper sets out the information obtained and the analysis undertaken. The exercise proved timely in that it co-incided with an Inquiry into the safety of long distance coach operations by the House of Representatives Standing Committee on Transport Safety.

A draft of this Paper was presented at a seminar on long distance surface passenger transport in Sydney on 26 July 1985 and was subsequently edited to take account of comments received from industry and other sources.

The BTE acknowledges with thanks the co-operation of the industry in the provision of information and the assistance received from State authorities in relation to both the provision of data and interpretation of State Licensing regulations.

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December 1985

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CHAPTER 1-INTRODUCTION

Recent years have seen a major increase in the level of competition within the long distance coach industry in Australia. This competition has led to a significant fall in fares and a reported growth in passenger numbers. At the same time, it has been suggested in some quarters that commercial pressures have led to adoption of unsafe practices. As a result, at the time of writing, the House of Representatives Standing Committee on Transport Safety is inquiring into the industry.

Initial examination of information sources revealed an almost complete lack of reliable, publicly available, disaggregate data on the industry. Information used in preparation of this Paper was obtained in discussions with coach operators and State authorities, by detailed analysis of coach timetables and observations of coach occupancy. However, information on the size and income of the industry is still based on estimates rather than on any formal industry returns.

In this study, the long distance coach industry is taken to be the collection of operators providing scheduled services over individual route lengths of more than 160 kilometres, on either intrastate or interstate routes.

The coach industry is described in Chapter 2 in terms of the operators providing services and the routes covered. The number of passengers travelling on scheduled intercapital coach services is estimated to allow the size of the coach market to be compared with that of other types of public transport; in this case rail and air. The historical development of fares is examined to determine the effect of the low fare entrants.

The socio-economic characteristics of passengers are examined and compared with those of travellers by rail, air and car. This allows the segment of the passenger market served by the coach industry to be described and possible sources of future passengers to be identified.

A case study of a small coach operation providing services between Brisbane and Perth via Melbourne is used in Chapter 3 to estimate the cost of operating coaches. The major areas considered are capital costs, the wage costs of the alternative driver provision schemes and vehicle operating costs. Of major interest is the margin between the estimated costs and fare revenue. This margin provides for overhead costs and profit.

Chapter 4 describes the institutional framework of the industry under four separate but interrelated headings. They are quantity (economic) regulation, safety standards, the provision of the road infrastructure system by government and the organisational setting of employers and employees within the industry.

Industry competition in terms of structural attributes, pricing practices and industry performance is discussed in Chapter 5. The issues addressed include entry/exit barriers, modal competition, levels of service, industry concentration and stability, safety and fare levels.

The trends and issues confronting the industry are discussed in Chapter 6. The major topics considered are government involvement, competition within the industry and between modes, and growth, investment, costs and productivity.

CHAPTER 2-DESCRIPTION OF THE INDUSTRY

This chapter provides a descriptive background to the long distance coach industry, highlighting factors such as major operators, route services, passenger characteristics and fare development. Much of the information concerning route services and passenger numbers was derived from operator timetables current as at November 1984.

There were between 40 and 50 operators providing long distance coach travel throughout Australia. The majority of these (approximately 30 to 40) provided only intrastate services, while there were 10 operators whose main business was to provide intercapital services.

At the interstate level there were 464 return services per week scheduled between the capital cities and around 1.7 to 2.0 million passenger journeys annually. The interstate coach fleet consisted of between 200 and 250 coaches which were estimated to cover around 65 to 75 million route kilometres each year.

The majority of interstate services occur between the eastern States, which account for 69 per cent of all intercapital services. A further 18 per cent were services between Adelaide and the eastern States.

The intercapital section of the long distance coach industry was estimated to generate an annual income (based on November 1984 timetables and fares) of approximately \$80 to \$90 million, whilst directly providing employment for around 2000 people. Additional employment is created by the coach industry in the tourism, coach building and maintenance industries.

At the long distance intrastate level, the information available indicates that there were between 800 and 950 return services per week and in the order of two million passenger journeys per year. The most extensive intrastate network was in Queensland, which accounts for approximately half the number of services and passengers.

OPERATORS

Interstate coach operators

In November 1984 there were about 10 coach companies operating interstate coach services throughout Australia. Of these, four major operators dominated the market: Ansett Pioneer, Greyhound, Deluxe Coachlines, and the Australian VIP Leisure Tours (VIP). There were three small to medium coach companies: Across Australia Coachlines (AAC), Olympic East West (OEW) and McCafferty's. As well as the medium to large businesses there were a number of minor operators who provided only return services on single intercapital city routes. These operators included: Aussie Express, Northwest Express and Intertours.

The four major companies mentioned above each operated between 90 to 115 return services per week on intercapital routes (see Table 2.1) with each operator effectively using around 40 to 45 coaches in providing these services. VIP, for example, were using 43 coaches at the end of 1984 and Deluxe 41 coaches. On the other hand, Ansett Pioneer at the end of 1984 operated about 70 coaches exclusively on interstate routes. The medium sized operators, OEW, McCafferty's and AAC, were each operating around 10 to 12 coaches towards the end of 1984.

With the entry of new operators between 1980 and 1984, including OEW, VIP, Deluxe and AAC, there has been a marked reduction in the age profile of the coach fleet. This has occurred because these operators entered the industry with new coaches, generally financed under lease arrangements, so that the average fleet age at the end of 1984 was only about two to three years.

On the other hand, the established operators, Ansett Pioneer and Greyhound, were running fleets with a considerably older age structure. Some of the coaches used by Ansett Pioneer in 1984 were up to 16 years old, the average age of their coach fleet being around 10 to 12 years. However, both Ansett Pioneer and Greyhound have recently undertaken major fleet upgrading with the purchase of new coaches during 1984 for use on the major intercapital routes.

With respect to the total number of coaches in the intercapital section of the industry, a Bureau of Transport Economics (BTE) analysis of the number of services operated on the major intercapital routes by the major operators indicated that there would be in the order of 200 to 250 coaches essentially dedicated to intercapital

operations. However, this number would increase in the peak periods with greater use of subcontractors and coaches usually used for other operations such as tours and charters.

In terms of industry employment, information supplied by industry sources suggests that the intercapital industry was directly responsible for the employment of around 2000 people including drivers, clerks, maintenance and management staff. This figure does not include subcontractors or franchise staff but, on the other hand, does include some administrative staff employed in the subsidiary areas of the larger operators, such as tour and charter operations. In addition, the industry generates employment in other industries it interacts with.

Intrastate operators

While intercapital services were dominated by four operators, each with a national network, intrastate services were generally dominated by operators specific to the individual States. The four major interstate operators also have some pick up and set down rights within States, although these generally apply only to their intercapital services.

In New South Wales there were ten intrastate long distance operators concentrated mainly in the north coast area and around Canberra and the south coast. The major operators were Kirklands and Skennars in the north coast area and Murrays based in Canberra. Intrastate licences were also held by Ansett Pioneer, Greyhound, VIP and Deluxe which allow intrastate travel over some of the major highways of New South Wales.

In Victoria many long distance intrastate coach services were operated under contract to V/Line rather than as independent operators. This led to a co-ordinated coach/rail timetable being issued, coaches being painted in V/Line colours, new services being introduced (such as Albury to Adelaide) and publicity of services being provided. The major independent long distance coach operators were Ansett Motors¹ and L. C. Dyson Bus Service.

Long distance coach travel in Queensland was dominated by three major operators, Greyhound, McCafferty's and Ansett Pioneer. Between them, they accounted for some 73 per cent of long distance services. Other

1. Ansett Motors is part of Ansett Transport Industries.

operators included Skennars, Karumba Connection, J. F. and V. F. McGrath, VIP and Deluxe.

In South Australia there were seven operators providing long distance coach services. The major operator was Stateliner which carried 68 per cent of long distance passengers in 1983-84. Other operators included: Murray Bridge Passenger Service, with 11 per cent of passengers; Premier, 8 per cent; Briscoes, 6 per cent; and Mt Gambier Bus Service, 6 per cent. Ansett Pioneer and Greyhound both have licences to carry passengers intrastate although these licences allow these passengers to be carried on their interstate services.

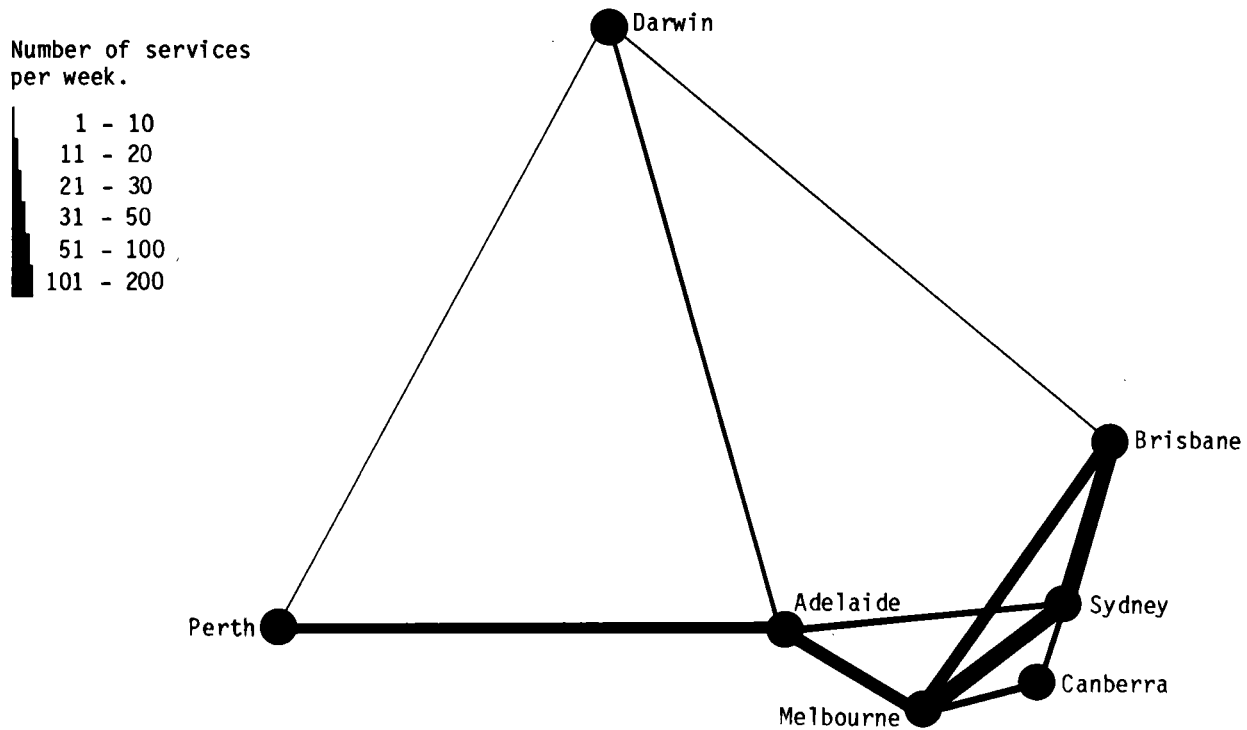
ROUTE SERVICES

Interstate services

The major route services provided by the long distance coach operators were those between the capital cities of Australia. Although the greatest concentration of services was along the eastern-seaboard and throughout south-eastern Australia, the present express coach network provided a complete passenger link between all the mainland capital cities.

Although the following route service analysis uses the name of the principal operator, the major operators use franchise arrangements on some of their routes. For example, a significant number of Greyhound services throughout southern Australia are actually provided by Stateliner under franchise. Ansett Pioneer also has a number of routes operated under franchise, for example, Briscoes in South Australia. As such, the networks of the major operators described below are described in aggregate terms, including those services provided under franchise.

The November 1984 network is illustrated in Figure 2.1, which maps out the major intercapital routes showing relative route density. This route information is then detailed in Table 2.1, which shows the number of regular scheduled services on the intercapital routes by route and operator. This table does not include all services available owing to the recent entry of several smaller operators, for example, Aussie Express, who usually operate only a small number of services over only one or two routes. The services shown are scheduled return services and represent the base case as more than one coach can be operated on each service.



Source: Prepared by BTE.

Figure 2.1-Levels of service on major intercapital route services, 1984

TABLE 2.1-MAJOR INTERCAPITAL ROUTE SERVICES, BY ROUTE AND OPERATOR, NOVEMBER 1984
(return services per week)

Route	Operators							Total
	Greyhound	Deluxe	VIP	McCafferty's	Ansett Pioneer	AAC	OEW	
Brisbane-Sydney	21	21	35	35	14	..	..	126 (27)
Brisbane-Melbourne	6	14	14	..	14	..	4	52 (11)
Sydney-Melbourne	25	21	28	..	14	3	7	98 (21)
Sydney-Adelaide	7	..	7	..	14	..	..	28 (6)
Sydney-Canberra	..	..	..	..	14	..	..	14 (3)
Canberra-Melbourne	..	7	..	..	21	..	..	28 (6)
Melbourne-Adelaide	15	14	14	..	7	3	3	56 (12)
Adelaide-Perth	7	10	7	..	7	3	3	37 (8)

TABLE 2.1 (Cont)-MAJOR INTERCAPITAL ROUTE SERVICES, BY ROUTE AND OPERATOR, NOVEMBER 1984
(return services per week)

Route	Operators						Total	
	Greyhound	Deluxe	VIP	McCafferty's	Ansett Pioneer	AAC		OEW
Adelaide-Darwin	7	..	..	..	4	..	..	11 (3)
Perth-Darwin	1	2	..	..	1	..	..	4 (1)
Darwin-Brisbane	5	..	..	..	5	..	..	10 (2)
Total	94	89	105	35	115	9	17	464
Per week	(20)	(19)	(23)	(7)	(25)	(2)	(4)	(100)

.. not applicable

Note: Figures in brackets are per cent of services.

Source: Greyhound, Deluxe, VIP, McCafferty's, Ansett Pioneer, AAC and OEW timetables.

Figure 2.1 and Table 2.1 show intercapital routes as direct services and thus do not differentiate between intercapital services which follow different routes. However, it should be noted at this stage that operators were not necessarily able to pick up and set down passengers anywhere along these routes. The picking up or setting down of passengers within a State must either be associated with interstate travel, or be covered by intrastate route licences.

In terms of network coverage it can be seen that the two largest operators, Greyhound and Ansett Pioneer, provided an extensive network service between all capital cities. These companies also provided a wide coverage of inland towns and cities, particularly through New South Wales, as a result of services between capital cities which follow different routes.

Of the other operators, Deluxe scheduled services around Australia but did not operate a link between Adelaide and Darwin. VIP operated services between Perth and the eastern States as well as north to Cairns in Queensland. OEW and AAC basically operated between Brisbane and Perth. OEW did not operate between Brisbane and Sydney but instead operated services from Brisbane to Melbourne and Sydney to Melbourne and then on to Perth. AAC provided three services per week from Sydney to Perth via Melbourne and Adelaide. McCafferty's withdrew from the Sydney-Melbourne route in late 1984 and operated on only one interstate route; that between Brisbane and Sydney.

As well as the major operators mentioned above there were also a number of smaller operators. These include Aussie Express on the Sydney-Adelaide route, and Northwest Express on the Sydney-Brisbane route via Dubbo.

Intercapital coach services in Australia can be categorised by area into one of four zones. The four zones are shown in Figure 2.2.

Zone 1 refers to services along the eastern seaboard and includes services between Brisbane, Sydney, Canberra and Melbourne; Zone 2 services are east-west feeder services linking the eastern States with Adelaide; Zone 3 is the east-west link and consists of services between Adelaide and Perth; while Zone 4 refers to services throughout the central, north and western areas of Australia. Table 2.2 presents the number and percentage of services for each zone.

Zone 1 contained the largest number of services, accounting for 69 per cent of all intercapital services throughout Australia. Within this

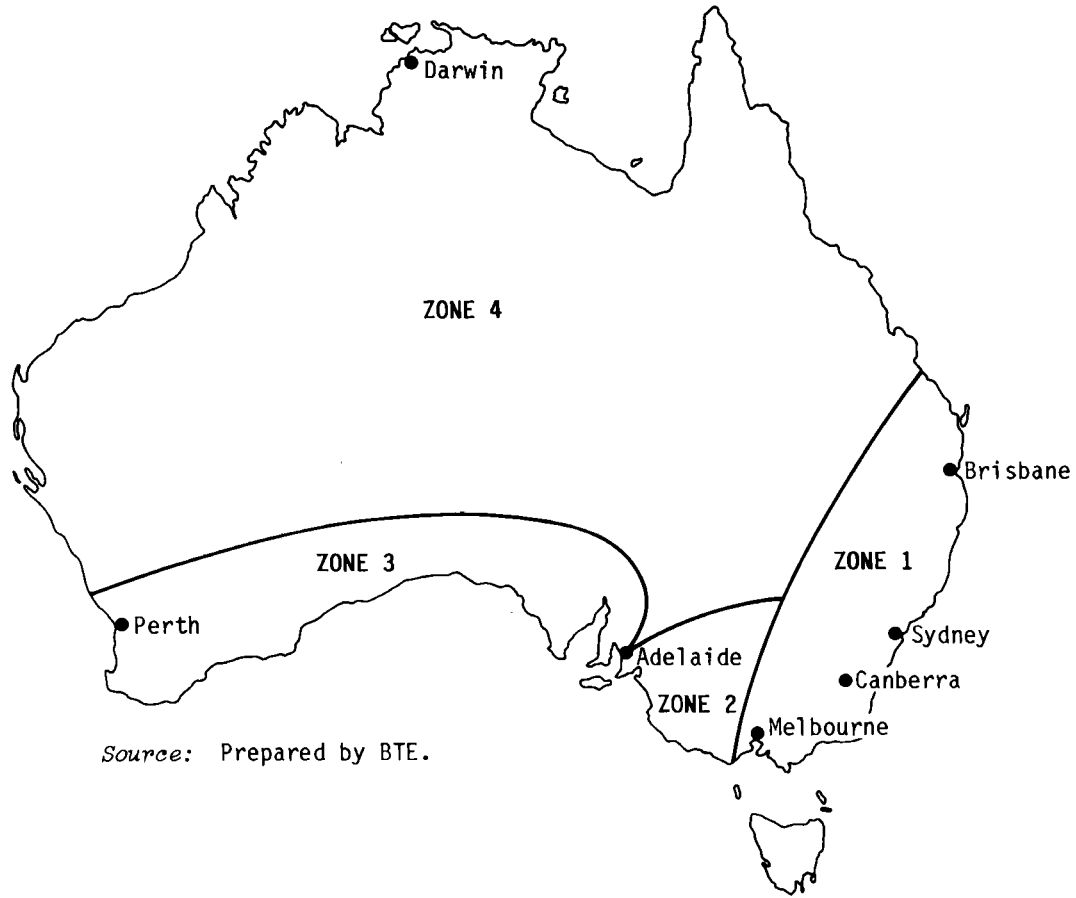


Figure 2.2-Zones of the levels of service on major intercapital routes, 1984

zone the route with the greatest number of services was Brisbane-Sydney with 126 return services per week. The major operators on this route were VIP and McCafferty's who each provided 35 return services per week. This was the only intercapital express service operated by McCafferty's and provided a link between Sydney and their intrastate network throughout Queensland.

The Melbourne-Sydney route had the next highest number of services with 98 per week. However, it is important to note that because Ansett Pioneer had a licence to operate between Sydney and Canberra (refer to section on regulation) some of their Melbourne-Sydney services were combined Melbourne-Canberra, Canberra-Sydney services and are recorded as such. VIP dominated the Sydney-Melbourne route, operating 28 return services per week. The other major route in Zone 1 was Brisbane-Melbourne with 52 return services per week. Deluxe, VIP and Ansett Pioneer share the majority of services on this route, each operating 14 return services per week.

Zone 2 had the next highest number of services, 84 return services per week or 18 per cent of total intercapital services. This Zone consisted of two intercapital routes: Melbourne-Adelaide, with 56 return services per week, and Sydney-Adelaide, with 31 return services.

The Melbourne-Adelaide route was dominated by Greyhound, Deluxe and VIP with 15, 14 and 14 return services respectively. It was also served by Ansett Pioneer, AAC and OEW.

Only three of the major operators served the Sydney-Adelaide route

TABLE 2.2-INTERCAPITAL SERVICES: BY ZONE, NOVEMBER 1984

<i>Zone</i>	<i>Number of return services per week</i>	<i>Per cent of total services</i>
1 Eastern seaboard	318	69
2 East-west feeder	84	18
3 East-west link	37	8
4 Central-north-western	25	5
Total	464	100

Source: Greyhound, Deluxe, VIP, McCafferty's, Ansett Pioneer, AAC and OEW timetables.

with Ansett Pioneer providing 14 return services per week, Greyhound 7 return services and VIP also with 7 services.

Zone 3 consists entirely of the Adelaide-Perth route on which there were 37 return services per week. There were six major operators serving this route with Deluxe offering 10 return services and Greyhound, Ansett Pioneer and VIP operating 7 return services each. AAC and OEW each operated 3 return services per week.

The remaining intercapital services covering central, northern and western Australia make up Zone 4. These routes included Darwin-Adelaide with 11 return services, Perth-Darwin 4 and Darwin-Brisbane, 10 per week.

The services operated in Zone 4 have generally been dominated by the two established operators, Greyhound and Ansett Pioneer. However, in late 1984 Deluxe, VIP and McCafferty's were granted licences to provide services between Brisbane and Cairns.

In summary, the majority of intercapital services (69 per cent) were operated in the eastern States between Brisbane and Melbourne. The number of services in all other zones was significantly less with 18 per cent of services in Zone 2, 8 per cent in Zone 3 and 5 per cent in Zone 4. In total there were approximately 460 return services each week over the intercapital routes.

It is important, however, to note that these service frequencies refer only to standard schedules. They do not include extra services scheduled for holiday periods, such as Christmas-New Year when extra services were provided from mid-December to the end of January.

Experience over the 1984-85 Christmas period indicates that the express operators have considerable flexibility in their response to increases in demand. Table 2.3 presents the extra services scheduled by four of the major operators over the 1984-85 Christmas-New Year period and published in their timetables¹.

It can be seen that during this period these operators added 259 extra services per week to their schedules, representing an increase of 64 per cent on the standard services scheduled by these operators. Not only did the operators increase the number of services over existing

1. Some operators have advised that they ran more services, often as double headers, than their timetable indicated.

routes, but they also added new routes. For example, the extra Greyhound services between Brisbane and Melbourne were scheduled via Moree, Wagga Wagga and Wangaratta, a different route from that used for their normal services.

As well as scheduling extra services operators can also increase the number of passengers in total by running 'double headers', that is, by running two or more coaches over a route which has only one service scheduled. These, however, are not readily identifiable and are not included in service statistics, although they provide increased capacity in peak periods.

As an example of the use of 'double headers', Ansett Pioneer on the

TABLE 2.3-EXTRA-SCHEDULING OF SERVICES: CHRISTMAS-NEW YEAR, 1984-85

<i>Operator</i>	<i>Route</i>	<i>Number of extra services per week</i>	<i>Total</i>
Greyhound	Brisbane-Melbourne	8	38
	Sydney-Melbourne	14	
	Sydney-Adelaide	14	
	Melbourne-Adelaide	2	
Deluxe	Brisbane-Sydney	28	74
	Sydney-Melbourne	14	
	Melbourne-Adelaide	14	
	Adelaide-Perth	12	
	Sydney-Adelaide	6	
Ansett Pioneer	Melbourne-Sydney	42	105
	Sydney-Brisbane	7	
	Melbourne-Adelaide	28	
	Adelaide-Perth	28	
VIP	Sydney-Brisbane	42	42
Total			259

Note: Only those extra services shown in operator timetables are shown.

Source: Greyhound, Deluxe, Ansett Pioneer and VIP timetables.

Sydney-Canberra route often runs at least one extra coach per service during the off-peak period with this increasing to around six or seven extra coaches on some services during the peak period. This would lead to a significant increase in the estimated number of passengers carried on this route as indicated in Table 2.4.

In addition operators are able to increase their capacity in times of high demand by:

- . reducing turnaround time between journeys;
- . using subcontractors; and
- . incorporating coaches into their express fleet that are usually used for tours or charter, etc.

Intrastate services

This section looks at route coverage in the States of Australia by both intrastate coach operators and by interstate operators with intrastate licences. Three States, South Australia, New South Wales and Queensland, are considered in detail.

Long distance routes in South Australia extend in the south to Mt Gambier and Bordertown, in the east to Renmark, north towards Broken Hill, Arkaroola and Alice Springs, and in the west to centres such as Yorketown, Port Pirie, Port Augusta, Port Lincoln and Ceduna.

In 1983-84 long distance coach services covered approximately 8 million kilometres throughout South Australia, consisting of around 9050 return trips.

As pointed out in the previous section, Stateliner was by far the largest of the operators, providing around 100 return services each week. Stateliner provided services from Adelaide to Renmark, Ceduna, Arkaroola, Loxton, Pt Lincoln, Quorn, the Northern Territory border via Port Augusta, the New South Wales border via the Barrier Highway, Whyalla and Wilpena.

The next largest of the operators was Murray Bridge Passenger Service with around 25 return services per week to Pinnaroo, Premier Roadlines with 12 return services per week to Meningie and Moonta, and Briscoes with 11 return services per week around the York Peninsula to centres such as Yorketown, Maitland and Port Victoria.

Ansett Pioneer and Greyhound also had intrastate licences to pick up

TABLE 2.4-INTERCAPITAL JOURNEYS: ESTIMATED CAPACITY AND PASSENGER TRIPS, 1984

Route	<u>Normal period (52 weeks)</u>			<u>Peak (6 weeks)</u>			<u>Total (normal + peak)</u>		
	Services per week	Passengers		Additional services per week	Passengers		Services per year	Passengers	
		Capacity	Passengers		Capacity	Passengers		Capacity	Passengers
Brisbane- Sydney	252	11 088	8 300	77	3 386	3 000	13 566	597 000	451 000
Brisbane- Melbourne	104	4 576	3 400	8	352	300	5 456	240 000	180 000
Sydney- Melbourne	196	8 624	6 500	70	3 080	2 800	10 612	467 000	353 000
Sydney- Adelaide	56	2 464	1 800	20	880	800	3 032	133 000	101 000
Sydney- Canberra	28	1 232	900	..	..	..	1 456	64 000	48 000
Canberra- Melbourne	56	2 464	1 800	..	..	..	2 912	128 000	96 000
Melbourne- Adelaide	112	4 928	3 700	44	1 936	1 700	6 088	268 000	203 000
Adelaide- Perth	74	3 256	2 400	40	1 760	1 600	4 088	180 000	136 000

TABLE 2.4 (Cont)-INTERCAPITAL JOURNEYS: ESTIMATED CAPACITY AND PASSENGER TRIPS, 1984

Route	<u>Normal period (52 weeks)</u>			<u>Peak (6 weeks)</u>			<u>Total (normal + peak)</u>		
	<u>Services</u> per week	<u>Passengers</u>		<u>Additional</u> services per week	<u>Passengers</u>		<u>Services</u> per year	<u>Passengers</u>	
		Capacity	Passengers		Capacity	Passengers		Capacity	Passengers
Adelaide-									
Darwin	22	968	700	..	..	..	1 144	50 000	38 000
Perth-									
Darwin	8	352	300	..	..	..	416	18 000	14 000
Darwin-									
Brisbane	20	880	700	..	..	..	1 040	46 000	34 000
Total	928	40 832	30 600	259	11 396	10 300	49 810	2 192 000	1 654 000

.. not applicable

- Notes: 1. Figures may not add due to rounding.
 2. This table represents a low estimate because of 'double-headers' and other additional services which may not be fully accounted for.

Source: BTE calculations based on Greyhound, Deluxe, VIP, McCafferty's, Ansett Pioneer, AAC and OEW timetables, observations by BTE and discussion with industry sources.

and set down passengers on their regular interstate services between Melbourne and Adelaide, and Adelaide and Perth.

In New South Wales localised route services were concentrated on the north coast and inland areas and south between Canberra and the south coast.

Kirklands operates services in northern New South Wales between Ballina and Sydney (7 return services per week), Lismore and Tenterfield (6 return services), and between Lismore and Tweed Heads (6 return services). Skennars provides services between Sydney and Port Macquarie and Port Macquarie and Tamworth (14 and 3 return services per week respectively). Bulladelah Bus Company operates services between Newcastle and both Bulladelah and Forster. Other services include Moree-Tamworth (Goldline Coaches), Inverell-Tenterfield (Border Coaches) and Cessnock-Sydney (Batterhams Bus Lines).

Services between Canberra and the south coast are operated by two operators, P. J. Evans and Murrays, who provide services between Canberra-Bega, Canberra-Narooma, and Canberra-Wollongong.

In New South Wales additional routes were provided by the four major interstate operators, Deluxe, Greyhound, VIP and Ansett Pioneer, who had intrastate licences associated with some of their interstate routes. Ansett Pioneer, for example, had pick up and set down rights on their Melbourne-Brisbane route via the Newell, Oxley and New England Highways, on the Sydney-Adelaide route via Broken Hill, and along certain sections of the Hume Highway between Sydney and Melbourne.

Deluxe also had pick up and set down rights along the Melbourne-Brisbane route via the Newell, Oxley, New England and Gwydir Highways and could also carry passengers between Tarcutta and Sydney on their Sydney-Melbourne service.

Greyhound had intrastate licences for its Melbourne-Brisbane services via Moama and Tenterfield, via Albury and Goondiwindi, and via Tweed Heads. They also had pick up and set down rights on their Adelaide-Sydney route via Canberra and via Cowra.

VIP had an intrastate licence for its Adelaide-Sydney service.

All the intrastate licenses in NSW have restrictions as to where passengers can be picked up or set down.

In terms of intrastate services per week Queensland had the most extensive route coverage of all States. In all there were 229 return services per week throughout Queensland.

The majority of services in Queensland were located in centres along the east coast including towns and cities such as Brisbane, Rockhampton, Mackay, Townsville and Cairns. Other services provided inland were Cairns-Karumba, Townsville-Mt Isa, Rockhampton-Longreach, Brisbane-Longreach, and Longreach-Mt Isa. Two routes in particular, Brisbane-Rockhampton and Rockhampton-Mackay, had services which deviated inland in addition to their coastal services.

Greyhound provided 54 return services per week between centres such as Brisbane-Cairns, Brisbane-Mt Isa, Brisbane-Longreach, Townsville-Northern Territory via Mt Isa, and Rockhampton-Longreach.

McCafferty's operated 71 return services per week between centres such as Brisbane-Rockhampton, Mackay-Rockhampton, Rockhampton-Monto and Toowoomba-Gympie. However, McCafferty's together with Deluxe and VIP were granted licences to provide services between Brisbane and Cairns in late 1984.

Skennars operated 34 return services per week on four long distance routes; Brisbane-Stanthorpe, Brisbane-Goondiwindi, Brisbane Wallangara, and Brisbane-Charleville.

Other operators included J. F. and V. F. McGrath, servicing Cairns-Cooktown, and Karumba Connection between Cairns-Karumba.

Ansett Pioneer also have intrastate licences in Queensland between Brisbane-Cairns, Brisbane-Charleville, Cairns-Cooktown, and Townsville-Mt Isa and provided 42 return services per week.

In Victoria V/Line, as a result of the contracting system, was the major operator with its most important long distance routes being Mildura-Melbourne and Bendigo-Sea Lake. There were six return services a week by coach between Mildura and Melbourne each week and 12 co-ordinated rail/coach return services. Bendigo and Sea Lake were served by six return services each week that co-ordinate with trains from Melbourne.

The major independent routes were those provided by L. C. Dyson Bus Service between Melbourne and Barham, and by Ansett Motors between Melbourne and Mt Gambier.

PASSENGER CAPACITY

Interstate passenger journeys and revenue

Whilst there were no readily available statistics on the number of passenger journeys, it was possible, by calculating the number of available seats, to estimate the number of passenger journeys on intercapital express coach services.

Table 2.4 sets out the number of scheduled services, derived capacity level and estimated number of trips. There are two distinct periods, that based on normal scheduled services and the peak period of six weeks based on extra services scheduled for the Christmas-New Year holiday period (see Table 2.3).

Passenger numbers have been calculated using the assumption that the average coach has a 44 seat capacity, with a 75 per cent occupancy rate in the normal period and 90 per cent for the extra services in the peak period. These occupancy rates are based on observation by BTE staff and discussion with industry sources. The columns headed capacity represent available capacity in the appropriate period.

Using scheduled services for the estimation it would appear that the total capacity of the interstate express coach industry would be in the order of 2.2 million passenger journeys per year. This could probably be increased without the use of additional coaches by reducing idle and turnaround time. Based on an occupancy rate of 75 per cent throughout the year and 90 per cent for extra services over the Christmas period this means that there would be around 1.7 million passenger journeys made per year¹ (based on November 1984 timetables for seven major operators). This is a conservative estimate as 'double headers' have not been allowed for.

The effect of operating extra services over the Christmas-New Year period can clearly be seen from Table 2.4. The extra services scheduled over this period by the four major operators, Ansett Pioneer, Greyhound, Deluxe and VIP, lead to an estimated increase in passenger capacity of 11 000 per week or around 68 000 over the six-week period.

1. Industry advice is that a figure of around 2.0 million passenger journeys is more likely but some parties also argued that the occupancy rates used were too high; this would yield a lower figure. ABS (1985) estimated that 1.0 million people undertook bus trips of more than 200 kilometres in 1983.

There are no directly applicable sources of information on the passenger growth of the intercapital coach industry. Using information from the Australian Standing Committee on Tourism (1984) (figures on the total number of interstate coach travellers, including tours and charters), it would appear that the number of intercapital travellers increased by 60 per cent¹ in the period 1980 to 1984.

Using scheduled route services on an operator/route basis, it is possible, by applying the appropriate fares, to estimate the annual gross fare revenue for the industry. Based on November 1984 timetables, it would appear that the intercapital express coach industry was earning around \$80 million annually in fare revenue. This estimate does not allow a loss of revenue to operators who offer concession fares.

While these estimates include extra scheduled services it is also possible for operators to achieve higher real occupancy rates by immediately filling seats which are vacated en-route. This can only occur, however, where trips are part of an interstate trip or where the operator has a licence to pick up and set down intrastate passengers.

It is also possible for operators to increase fare levels during peak periods as well as adding new services. One operator, AAC, added an extra service per week on its intercapital routes in the 1984-85 peak around Christmas and increased its fares on all routes. The Melbourne-Sydney fare, for example, was increased from \$24.00 to \$29.00 and the Sydney-Perth fare from \$115.00 to \$125.00 for this period. Hence the estimate of industry revenue is most likely on the low side.

Intrastate passenger journeys and revenue

Statistics on intrastate passenger journeys from published sources or without confidentiality provisions were only available for South Australia and Victoria. However it is possible to estimate passenger journeys using the methodology used for the interstate section of the industry.

Statistics for South Australia (Director-General of Transport 1984) show that in the financial year 1983-84 there were approximately

1. The industry believes that it has grown between 100 and 200 per cent since 1980 but BTE has no data to substantiate this assertion.

400 000 long distance passenger journeys made throughout the State. The route with the greatest patronage was the Adelaide-Whyalla route, operated by Stateliner, which accounted for around 135 000 passengers, more than twice that route's usual patronage. This corresponded to the period when the Adelaide-Port Pirie railway had been closed to passenger services for standardisation of the track. The next highest number of passengers was on the Adelaide-Port Lincoln route which accounted for approximately 52 000 passengers. Other relatively highly patronised routes included Pinnaroo (48 000 passengers), Ceduna (40 000 passengers), and Moonta (35 000). The 400 000 passenger journeys made in South Australia in 1983-84 represent a 20 per cent increase in patronage over the year 1979-80.

South Australian fare revenue (including subsidies) from the long distance routes in 1983-84 was reported to be in the order of \$5 million dollars whilst total revenue, including parcel and other revenue, was reported to be approximately \$6.5 million.

In Victoria about 180 000 long distance passengers were carried but no breakdown of passenger journeys is publicly available.

The number of passengers estimated for New South Wales in 1984 was 220 000. This estimate is based only on those services designated specifically as intrastate services and as such does not include intrastate passengers carried on services provided by the interstate operators Deluxe, VIP, Greyhound and Ansett Pioneer.

The number of long distance passenger journeys estimated for Queensland is approximately 700 000. Most intrastate services in Queensland are specifically intrastate and not part of an interstate service. The only interstate operator which currently carries long distance intrastate passengers on its interstate services is Greyhound on the Brisbane-Darwin route via Mt Isa.

If allowance is made for States for which data are unavailable or estimates of the number of passengers are not readily made, a total in the order of 2 million intrastate per annum passengers is obtained.

FARES

Fares are determined by costs, productivity and the level of competition within the industry. Costs are discussed in Chapter 3.

Fare structures in the coach industry have developed mainly in response to the degree of competition and fare discounting within the

industry. Between 1966 and 1984, there have been two distinct periods in the development of fares. The first period covers developments between 1966 and 1979.

Development of fares: 1966 to 1979

This period was characterised by a steady increase in fares and a relatively stable industry dominated by Ansett Pioneer and Greyhound. Various other operators, including Redline, Gold Coast, Panther and Cobb & Co entered the coach industry for brief periods although none of these appear to have made any significant impact on the fares charged by the industry.

The development of fares is illustrated in Figures 2.3 and 2.4 which show a real fare index for fares on the Sydney-Melbourne route between 1966 and 1984, and actual fares in nominal dollar terms between 1960 and 1984 (see Appendix I).

Ansett Pioneer introduced its first intercapital express service in 1955 and remained the only operator until Redline commenced operations in 1963. Ansett Pioneer's fare on the Sydney-Melbourne route was \$10.00 compared with the Redline fare of \$9.50. Redline maintained this fare until withdrawing from all routes in 1969. During this period Ansett Pioneer's fare on the Sydney-Melbourne route rose only slightly from \$10.00 in 1963 to \$11.80 in 1969.

Except for a slight reduction in fares between 1972 and 1973, the 1970s were characterised by a general upward trend in both nominal and real fares. As can be seen from Figure 2.3 Ansett Pioneer fares increased steadily from \$10.50 in 1966 to \$15.90 in 1971. After stabilising in 1972 the fare actually fell in 1973 but again increased steadily until reaching \$34.50 in 1979. In real terms the Ansett Pioneer fare increased by 14 per cent over this period after falling in 1972 and 1973.

The lowest fare available on the Sydney-Melbourne route also showed an upward trend over the period 1966 to 1978. After remaining constant between 1966 and 1969 the fare increased steadily until 1979 when it fell from \$31 to \$27. This fall corresponded with the entry to the industry of Deluxe in 1979.

In real terms the index of low fares showed an actual decline of one index point between 1966 and 1979. The reason for this overall decline was the entry of Deluxe, whose lower fares caused the index to fall from 113 in 1978 to 90 in 1979.

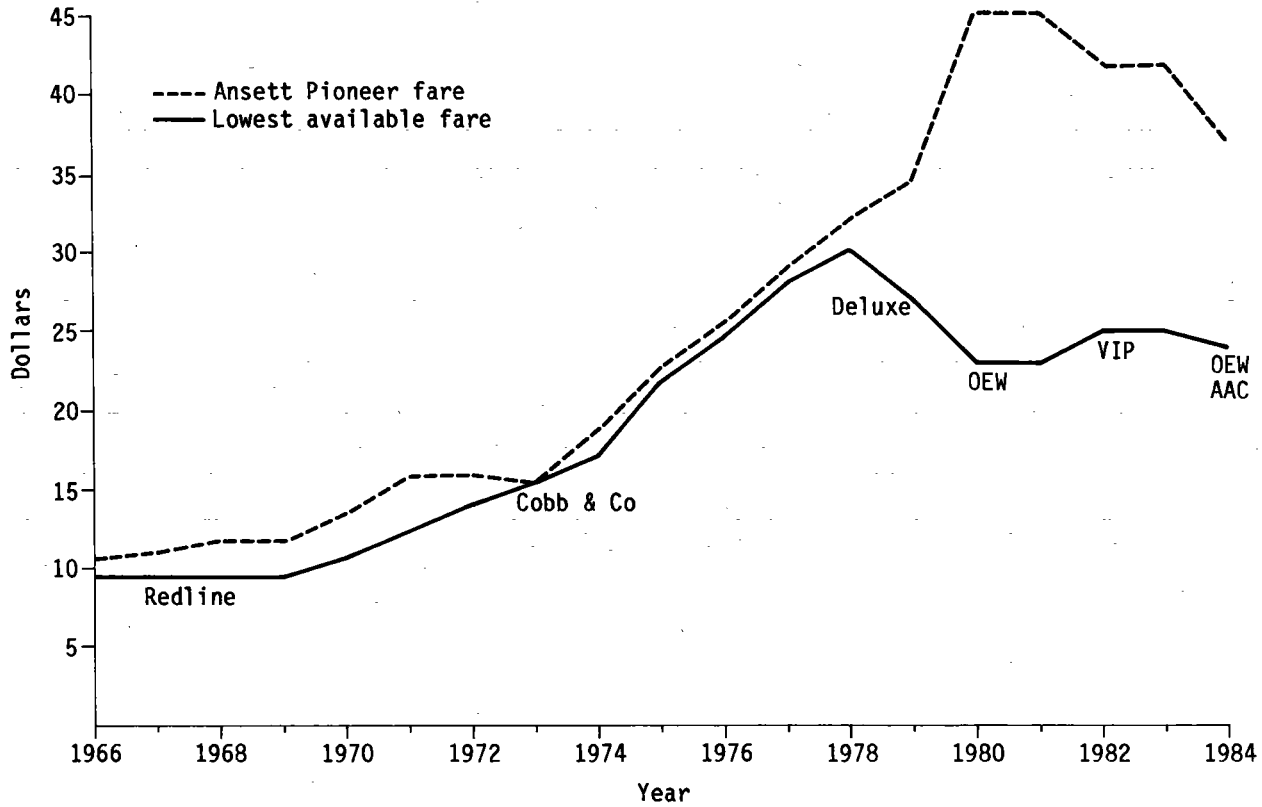


Figure 2.3-Coach passenger fares for Sydney-Melbourne: nominal price as at 1 November 1966-84

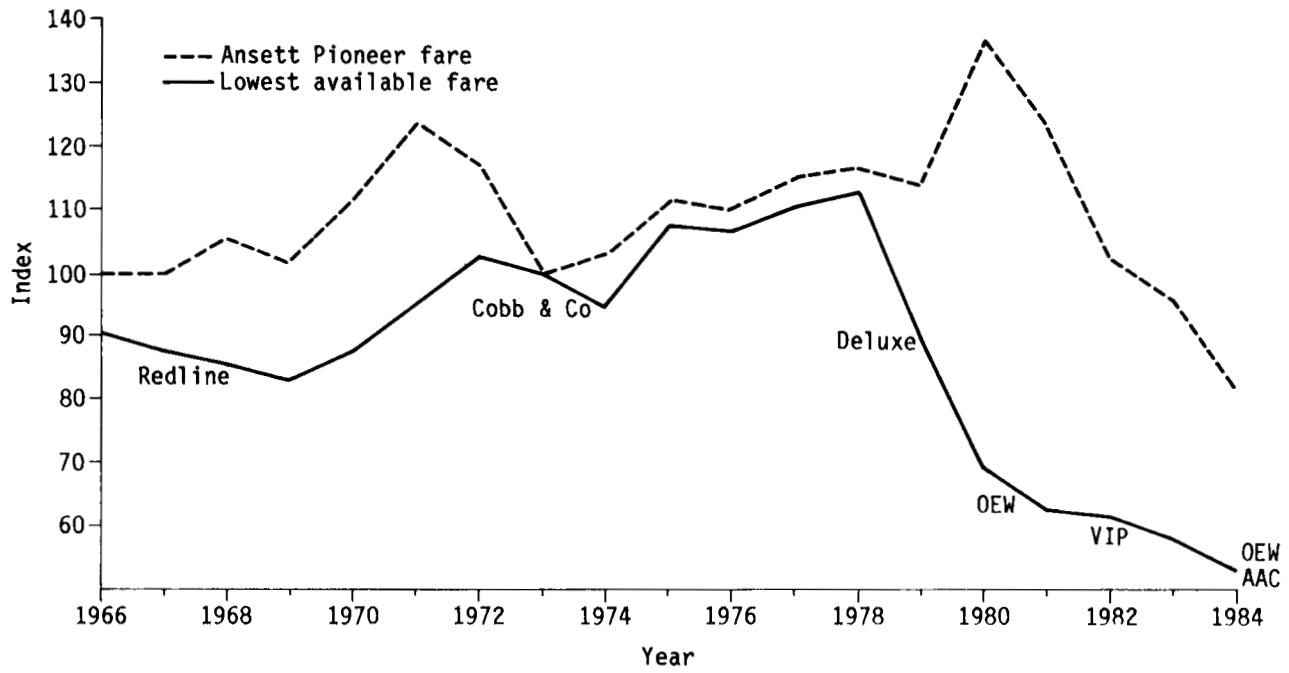


Figure 2.4—Coach passenger fares for Sydney-Melbourne: real price index, relative to 1966 Ansett Pioneer fare, as at 1 November 1966-84

During this period there were two other falls in the index: between 1966 and 1969 corresponding to the operation of Redline; and during 1974 when Cobb & Co entered the Sydney-Melbourne route.

From this it would appear that the only major reductions in fares were those introduced by a new low fare operator entering the route. It is significant that the major increase in the minimum fare occurred between 1975 and 1978 when Greyhound and Ansett Pioneer shared the market. The increase in Greyhound's fares over this period was greater than the increase in Ansett Pioneer's fares thus reducing the margin between their fare structures. By the end of the decade, Ansett Pioneer and Greyhound had established their dominance of the interstate express coach industry and by 1979 were operating a similar fare structure over the major routes.

It would appear that the limited entry of new operators during the 1970s, including Panther (1970-72) and Cobb & Co (1972-78), had little effect on the interstate coach industry. Throughout this period Ansett Pioneer appears to have assumed the role of market leader with the other operators content to have similar fare increases, whilst ensuring that their own fare structures remained slightly lower. When Ansett Pioneer and Greyhound were in a position to share the market Greyhound brought their fares into line with those of Ansett Pioneer.

However, this situation did not last long lasting due to the subsequent entry of Deluxe in 1979, a development which led to a second 'period' in the development of fares, characterised by increased competition and a steady decline in real fares.

Development of fares: 1980-84

The entry of Deluxe in 1979 did not have any immediate effect on the pricing policies of Ansett Pioneer or Greyhound, or the industry in general, except that it reduced the discount fare available on selected intercapital routes.

AAC and Sandgroper Express also entered selected intercapital routes in 1979 and another new operator, OEW, entered the industry in early 1980 undercutting the fares of the existing operators. OEW's fare on the Sydney-Melbourne route was \$23.00.

Both Ansett Pioneer and Greyhound continued to increase fares in 1980 despite the lower fares of Deluxe and OEW. On the Sydney-Melbourne route Greyhound and Ansett Pioneer were charging a fare of \$45.10 compared with \$27.00 for Deluxe and \$23.00 for OEW.

The entry of Deluxe and the decisions of Ansett Pioneer and Greyhound to increase their fares in 1980 widened the fare differential between the established operators and the newer low fare operators. Whilst the index of real Ansett Pioneer fares increased to 137 in 1980 the corresponding index of discount fares fell to 69. Thus, while Ansett Pioneer's fare continued to rise in real terms, the discount fare available in 1980 had actually fallen below its real 1966 level.

In January 1981, Greyhound reduced its Sydney-Melbourne fare to \$33.80, apparently in response to the fares being offered by Deluxe and OEW. By May 1981 this trend was reversed and Greyhound once again increased fares on this route, although only to \$35.00, thus breaking the nexus between its own fares and the \$45.10 fare maintained by Ansett Pioneer.

OEW maintained its introductory fare levels throughout 1981. Deluxe, whilst maintaining its \$27.00 fare during 1980-81, increased its fare on the Sydney-Melbourne route to \$34.00 in November 1981. This increase suggests that Deluxe planned to enter the industry and consolidate its position with a lower fare, before attempting to follow the established operators with fare increases at a later date.

However, such a situation did not occur due to the entry of VIP. VIP entered the intercapital routes in 1982 with a fare structure based on a \$25.00 fare between Sydney and Melbourne. This fare matched that of OEW on the Sydney-Melbourne route although VIP's fares were lower on the other major routes. The entry of VIP increased the number of low fare operators in the industry and added significant impetus to the rivalry already present in the industry.

In March 1982 Ansett Pioneer reduced its fare on the Sydney-Melbourne route to \$39.00. It appears that this reduction was in response to the lower fares being offered in 1981 by Greyhound, OEW and Deluxe. By November 1982 Deluxe had also reduced its Sydney-Melbourne fare to \$29.00 in response to fare reductions of Ansett Pioneer and Greyhound, the entry of VIP and the lower fares offered by OEW.

While 1982 was characterised by a downward trend in the fares of the established operators the reverse situation occurred in 1983 with Ansett Pioneer and Greyhound both increasing fares. Fares on the Sydney-Melbourne route were increased to \$41.90 and \$41.70 for Ansett Pioneer and Greyhound respectively. Their fare structures for the other intercapital routes were also similar. In the meantime, Deluxe maintained its \$29.00 fare throughout 1983.

The variable nature of fares continued into 1984 with Ansett Pioneer reducing fares in March 1984 and then increasing fares again in June and November. Ansett Pioneer fares on the Sydney-Melbourne route fell to \$33.00 in March, were increased to \$35.00 in June and again increased to \$37.00 in November. Greyhound followed a similar line, with its fares on the Sydney-Melbourne route falling to \$29.00 in March 1984 and increasing to \$35.00 by November 1984.

Deluxe also increased its fares in 1984, although not until November, when the Sydney-Melbourne fare \$29.00 was increased by \$1.00 to \$30.00.

Although its major competitors increased fares throughout the latter half of 1984, VIP maintained the same fare structure it used upon entering the industry in late 1982.

The continued operation of VIP with this discount fare led to the creation in November 1984 of a three-tiered fare structure in the industry. At the top of the range Ansett Pioneer and Greyhound charged \$37.00 and \$35.00 respectively on the Sydney-Melbourne route. Next was the middle of the range \$30.00 fare of Deluxe and at the bottom of the range the \$24.00 to \$25.00 fares used by AAC, VIP and OEW.

The effect of increased competition in the industry between 1980 and 1984 is illustrated clearly in Figure 2.3. Ansett Pioneer fares, after increasing to \$45.10 in 1981 fell to \$37 in November 1984. In real terms the Ansett Pioneer fare fell to 82 index points in 1984, 55 index points below its peak level in 1980. This means that the Ansett Pioneer fare in real terms was 18 per cent less in 1984 than in 1966.

With respect to the low fares it can be seen that after increasing to \$31 in 1978 they fell to be \$24 in November 1984. In real terms the index of low fares showed a decline from its peak in 1978 of 113 to be 53 in November 1984, less than half its value in 1978. This means that in real terms the lowest fare available on the Sydney-Melbourne route was 59 per cent of the lowest fare available in 1966.

As can be seen in Table 2.5 the fall in the real discount fare index between 1978 and 1984 corresponds to the entry of the various new low fare operators during this period. The first major fall occurred in 1979 with the introduction of OEW. It continued to fall in 1982 and 1983 with the entry of VIP and even further in 1984 with the low

\$24.00 fare introduced by AAC in November 1984. The undercutting of fares in 1984 by AAC illustrates its willingness to compete on the basis of price, AAC having actually entered the industry in 1979.

The degree of competition throughout the industry is also evidenced in the range of discounts that, whilst not always advertised, are available from the various operators. Some recent examples of both price and non-price competition have been highlighted in the current timetables and in press advertisements.

Greyhound, for example, has been advertising specially reduced accommodation at Flag Inns, 30 per cent reductions in Budget Car Rental, or special discounts at Pizza Hut Restaurants connected with travel on Greyhound express coaches. This has been combined with their standard advertising which emphasises factors of quality such as non-smoking, greater legroom and comfort, and faster limited stop services.

Ansett Pioneer has been offering special discount 'T-fares' on normal services as well as a plan which offers a free journey upon presentation of four previously used adult fare ticket stubs, (limited to the Canberra-Sydney route). Ansett Pioneer also offers cheaper standby fares. For example, the standby fare for Sydney-Melbourne in January 1985 was \$24.00 with similar reductions available on other routes.

VIP has introduced fare discounting through membership of the VIP Express Coach Club which entitles the member to a 10 per cent discount on fares purchases through VIP booking offices. There is a possible gain to the operator in this case because fares booked through their own booking offices avoid the commission payable (usually 15 to 20 per cent) when the booking is made through a travel agent.

Deluxe has also introduced fare discounting with their special fare available for journeys between Canberra and Melbourne which are made during daylight hours. This fare in January 1985 was \$24.00 compared with the standard \$27.00.

In an effort to maintain passenger numbers the railways have also introduced special discounts in recent years. An Advance Purchase discount is now available on the *Overland* journey between Melbourne and Adelaide for \$29.00 compared with the standard economy fare of \$42.00.

COACH FARES RELATIVE TO OTHER MODES

Prior to 1979 fares for long distance coach services were lower than for air services but higher than for corresponding train journeys. However, with the entry of the various low fare operators after 1979, coach fares fell to levels lower than corresponding fares in the rail system.

Tables 2.5, 2.6 and 2.7 present fares for the three passenger modes; coach, rail and air, for the 10 years to 1984 over the major intercapital routes. Fares quoted for both rail and air are economy fares and all fares are as at November of each year. The fares for the Sydney to Melbourne route are summarised in Figures 2.5 and 2.6 in nominal and real terms respectively.

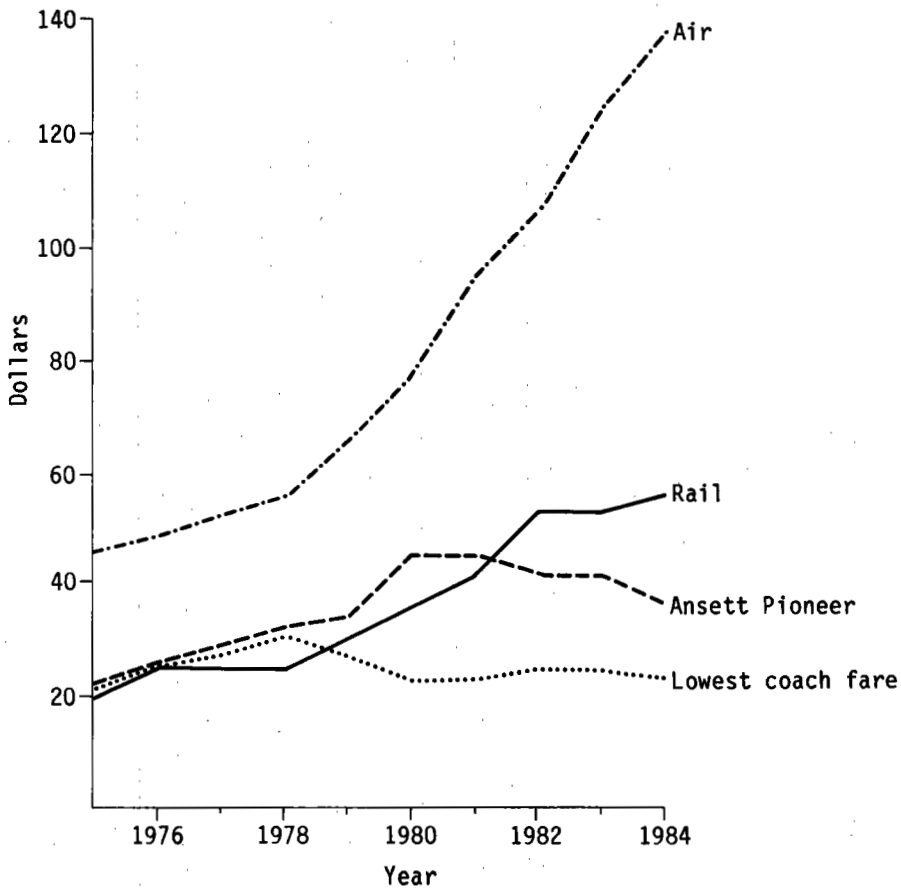


Figure 2.5-Nominal coach, rail and air adult fares for Sydney-Melbourne: as at 1 November 1975-84

In 1975 the economy rail fare for the Sydney-Melbourne route was \$20.00 compared with \$45.80 for the economy air fare and \$22.50 for Ansett Pioneer. On the Melbourne-Adelaide route the respective fares were \$16.00, \$42.40 and for express coach \$19.50.

It can be seen from these tables that the relative pattern of fares was maintained until 1979 when the rail fare was increased by \$5.00 on the Sydney-Melbourne route to \$30.00. By the end of 1979 Deluxe had entered the coach industry introducing a \$27.00 fare on this route, for the first time providing coach services at a fare cheaper than that of the railways. This was not the case on the Adelaide-Melbourne

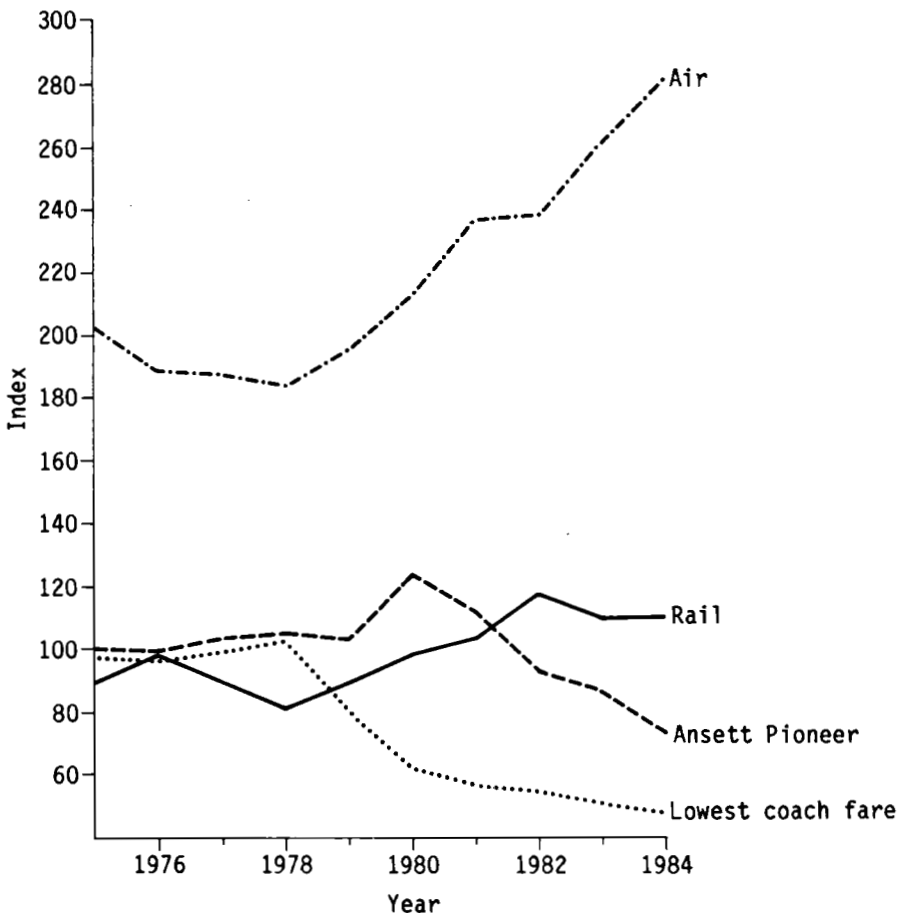


Figure 2.6-Real price index, relative to 1975 Ansett Pioneer fare, for coach, rail and air adult fares for Sydney-Melbourne: as at 1 November 1975-84

TABLE 2.5—RAIL PASSENGER FARES: CAPITAL CITIES ECONOMY SINGLE FARE, AS AT NOVEMBER 1975 to 1984
(dollars)

Year	Route					
	Brisbane- Sydney	Brisbane- Melbourne	Sydney- Melbourne	Sydney- Adelaide	Melbourne- Adelaide	Adelaide- Perth
1975	20.00	40.00	20.00	na	16.00	79.50
1976	25.00	50.00	25.00	na	20.00	100.00
1977	25.00	50.00	25.00	na	21.00	111.50
1978	25.00	50.00	25.00	na	21.00	126.00
1979	30.00	60.00	30.00	na	23.00	140.00
1980	36.00	72.00	36.00	na	28.00	166.50
1981	42.00	84.00	42.00	na	33.00	182.50
1982	53.00	106.00	53.00	na	42.00	216.00
1983	53.00	106.00	53.00	na	42.00	281.00
1984	56.00	112.00	56.00	98.00	42.00	315.00

na not available

Source: Appendix I.

TABLE 2.6-AIR PASSENGER FARES: CAPITAL CITIES ECONOMY SINGLE FARE, AS AT NOVEMBER 1975 to 1984
(dollars)

Year	Route					
	Brisbane- Sydney	Brisbane- Melbourne	Sydney- Melbourne	Sydney- Adelaide	Melbourne- Adelaide	Adelaide- Perth
1975	47.90	85.00	45.80	69.90	42.40	119.90
1976	50.80	90.20	48.50	74.20	45.00	127.70
1977	55.00	96.70	52.60	79.70	48.80	136.00
1978	58.50	101.60	56.10	84.00	52.20	142.20
1979	68.00	116.30	65.30	96.60	60.90	161.80
1980	80.70	130.30	77.60	113.60	72.50	189.00
1981	98.40	145.00	95.50	129.40	90.80	200.00
1982	110.20	162.30	106.90	144.90	101.60	223.90
1983	130.00	181.50	125.70	172.20	118.80	251.70
1984	145.70	214.00	140.90	192.50	133.10	280.60

Source: Appendix I.

TABLE 2.7-INDICATIVE COACH FARES: CAPITAL CITIES (LOWEST AND HIGHEST FARE) SINGLE FARE, AS AT NOVEMBER 1975
TO 1984

(dollars)

Year/operator	Route					
	Brisbane- Sydney	Brisbane- Melbourne	Sydney- Melbourne	Sydney- Adelaide	Melbourne- Adelaide	Adelaide- Perth
1975						
Ansett Pioneer	24.50	47.00	22.50	42.00	19.50	na
Cobb & Co	na	40.50	na	na	na	na
Greyhound	23.90	46.00	21.90	40.80	18.90	na
1976						
Ansett Pioneer	27.50	53.00	25.50	47.50	22.00	na
Cobb & Co	26.00	51.00	na	na	na	na
Greyhound	27.00	51.90	24.70	40.50	21.30	na
1977						
Ansett Pioneer	31.00	60.00	29.00	53.50	24.50	na
Cobb & Co	28.50	55.90	na	na	na	na
Greyhound	30.40	58.50	28.00	44.00	24.50	na
1978						
Ansett Pioneer	34.10	66.00	32.00	59.00	27.00	na
Cobb & Co	26.50	63.10	na	na	na	na
Greyhound	33.50	64.50	31.00	48.50	26.50	na
1979						
Ansett Pioneer	37.30	71.80	34.50	54.00	29.50	na
Deluxe	na	na	27.00	49.00	25.00	na

TABLE 2.7 (Cont)-INDICATIVE COACH FARES: CAPITAL CITIES (LOWEST AND HIGHEST FARE), SINGLE FARE AS AT NOVEMBER 1975 TO 1984

(dollars)

Year/operator	Route					
	Brisbane-Sydney	Brisbane-Melbourne	Sydney-Melbourne	Sydney-Adelaide	Melbourne-Adelaide	Adelaide-Perth
1980						
Ansett Pioneer	48.50	93.60	45.10	70.30	38.80	80.00
Olympic East-West	na	na	23.00	45.00	23.00	75.00
1981						
Ansett Pioneer	50.90	98.30	45.10	73.80	40.70	80.00
Olympic East-West	na	na	23.00	45.00	23.00	75.00
1982						
Ansett Pioneer	50.90	84.00	41.90	74.90	37.60	102.00
VIP	25.00	na	25.00	na	na	na
Olympic East-West	35.00	na	25.00	50.00	30.00	70.00
1983						
Ansett Pioneer	48.00	89.90	41.90	74.90	37.60	110.00
VIP	25.00	50.00	25.00	50.00	25.00	na
Olympic East-West	25.00	50.00	25.00	50.00	25.00	75.00
1984						
Ansett Pioneer	37.00	70.00	37.00	70.00	37.00	99.00
AAC	24.00	na	24.00	48.00	24.00	80.00

na not available

Source: Appendix I.

route, however, the rail fare at \$23.00 being \$2.00 cheaper than the fare charged by Deluxe. It is also important to note that at this time only Deluxe had a fare lower than the railways on the Melbourne-Sydney route, both Ansett Pioneer and Greyhound charged higher fares of \$34.50 and \$34.60 respectively.

In 1980 increases in all rail fares meant that Deluxe's fares were lower than all the competing rail fares, although Ansett Pioneer and Greyhound were still charging a fare higher than corresponding rail fares. On the Sydney-Melbourne route Deluxe's fare was \$27.00 compared with \$36.00 on the railways and \$45.10 for both Ansett Pioneer and Greyhound. The entry of OEW in 1980 widened the differential between rail fares and those of the low fare coach operators. OEW's fare between Sydney and Melbourne in 1980 was \$23.00, increasing the margin on this route to \$13.00. This pattern continued through 1981 with Greyhound also reducing fares to levels below those of the railways. Ansett Pioneer maintained its fares above those of the railways, but the margin was reduced in 1981 because Ansett Pioneer kept fares at 1980 levels while the railways increased fares. On the Sydney-Melbourne route in 1981 the rail fare was \$43.00. This compared favourably with the Ansett Pioneer fare of \$45.10, although Deluxe was charging \$34.00, Greyhound \$35.00 and OEW \$23.00.

OEW increased its fares in 1982 but increases in intercapital rail fares led to a further widening in the fare differential.

In 1982 VIP entered the industry and introduced a \$25.00 discount fare on the Sydney-Melbourne and Brisbane-Sydney routes while OEW increased its fare in 1982 to \$25.00 on the Sydney-Melbourne route. On the other hand the railways increased their fares in 1982 to \$53.00 for both these routes. This meant that coach services were available for less than half the price of the corresponding rail service. Deluxe still operated services at a lower fare than the railways, charging a \$29.00 fare for eastern seaboard routes.

On the Perth-Adelaide route Deluxe was charging \$95.00 compared with \$216.00 on the railways.

Ansett Pioneer, although increasing its fares on the Sydney-Melbourne route during 1982 to \$41.90, was also charging a fare below that of the railways so that in 1982 all intercity coach fares were below corresponding rail fares.

In 1983 most of the express coach operators maintained their fares at

1982 levels, as did the railways, so that the existing fare differentials were maintained.

Further reductions in coach fares, combined with increases in rail fares, meant that by the end of 1984 all the major coach operators were charging fares well below those of the railways.

Ansett Pioneer reduced its fares further to \$37.00 for Brisbane-Sydney-Melbourne routes and \$99.00 for the Adelaide-Perth route compared to rail fares of \$56.00 and \$315.00 respectively. VIP maintained its \$25.00 base fare and introduced a \$60.00 fare for the Adelaide-Perth service while Deluxe marginally increased its base fare to \$30.00. AAC (who entered in 1979) reduced its fare levels in November 1984 to the lowest of the operators, charging \$24.00 for the Sydney-Melbourne service.

The fare differential between coach and rail fares (which favoured the railways up to 1978) was reversed in the period between 1979 and 1984 to the extent that coach fares went from \$6.00 to \$7.00 more expensive in 1978 (Sydney-Melbourne route) to being \$19.00 to \$32.00 cheaper in November 1984.

It is important to note, however, that this situation did not hold when concession rate economy rail fares were used for the comparison. The lowest of the coach fares was still less expensive (\$24.00 compared with \$28.00), but Ansett Pioneer fares with a concession of 10 per cent were higher (\$33.00 compared with \$28.00 for rail).

The relative increases in fares for each of the three modes can be illustrated with reference to Figure 2.6 which shows an index of relative real fares. For comparative purposes two indexes are included under express coaches, one for the higher established operator fare and the other for the lowest fares available.

From Figure 2.6 it can be seen that all modes showed an increase in the index between 1975 and 1984 although variations in the rate of increase are marked.

As an adjunct to the comparison of fares between coach and rail it is important to compare journey times.

Table 2.8 presents a comparison of fares and journey times between rail and coach for selected intercapital routes. Fares are for one leg and the journey time includes stopovers.

TABLE 2.8-COMPARISON OF SINGLE FARES AND JOURNEY TIMES: COACH AND RAILWAY, 1984

Journey	Operator	Express coach			Rail			
		Fare (\$)		Time	Time	Fare (\$)		
		Adult	Concession	hr/min		hr/min	First class	Economy	Concession^{a}
Sydney-Melbourne	Ansett Pioneer	37.00	33.30	14/45	12/35	79.00	56.00	39.50
	VIP	25.00		12/30					28.00
Sydney-Adelaide	Ansett Pioneer	70.00	63.00	25/00	36/05	138.00	98.00	69.00
	VIP	50.00		22/00					49.00
Sydney-Brisbane	Ansett Pioneer	37.00	33.50	15/10	15/55	79.00	56.00	39.50
	VIP	25.00		16/00					28.00
Melbourne-Adelaide	Ansett Pioneer	37.00	33.50	11/35	11/30	59.00	42.00	29.50
	VIP	25.00		9/55					21.00
Melbourne-Brisbane	Ansett Pioneer	70.00	63.00	28/15	40/45	158.00	112.00	79.00
	VIP	50.00		28/30					56.00
Adelaide-Brisbane	Ansett Pioneer	100.00	90.00	32/45	64/45	217.60	154.00	108.50
	VIP	75.00		42/00					77.50

a. The concession is 1/2 the full rate; either first class or economy.

Source: Ansett Pioneer and VIP timetables, various train timetables, personal communication with Canberra Tourist Bureau.

It can be seen from Table 2.8 that journey times over the direct routes, for example, Sydney-Melbourne, are similar for rail and coach. A coach journey between Sydney and Melbourne is scheduled to take between 12 and 15 hours compared with the rail journey of 12.5 hours. On the Sydney-Brisbane journey coach is scheduled to take 15-16 hours compared with 16 hours by rail.

However, when the train journey involves a stopover, journey times are generally longer than by coach. For example on the Melbourne-Brisbane route the coach journey is scheduled to take approximately 28 hours compared with a train journey of 40-41 hours with a stopover in Sydney. There is also a considerable difference in journey times on the Sydney-Adelaide route where the most common train journey takes 36 hours via Melbourne compared with the direct express coach journey time of 22-25 hours. It is possible to travel directly between Sydney and Adelaide on the railway (Indian Pacific), however, this is a service limited in capacity and frequency.

PASSENGERS

There are two major sources of data concerning the socio-economic background of coach passengers. They are the National Travel Survey (NTS) (BTE 1981) and the BTE surveys of air travellers and coach travellers in November 1983 and early 1984 (BTE 1985a). These two sources are discussed separately as they allow different comparisons to be made.

National Travel Survey

The NTS was conducted over the 1977-78 financial year by BTE to provide a data base describing the characteristics and patterns of non-urban passenger travel within Australia. A postal survey with approximately 48 000 returned questionnaires was carried out between July 1977 and July 1978. A supplementary survey of about 3000 home interviews was also used to check responses to questions and to estimate the non-response bias.

A minimum trip length of 100 km was used by the NTS. Although this allows journeys of much shorter length than the interstate trips that are of major interest, it does provide detailed information that allows the characteristics of travellers in coaches, trains, cars or aircraft to be compared.

Table 2.9 compares the distribution of household income with type of vehicle used for the trip as well as the overall distribution of

personal income within the population, obtained from the 1976 Census (Australian Bureau of Statistics (ABS) 1978a). The figure shows that more coach and train travellers come from the low income categories than do car and air travellers. There also appears to be a greater representation of low income households by coach travellers than in the general population, although the Census figures are for personal income and are not completely comparable. In 1976-77 the average household income was \$4995 (ABS 1978b).

The higher proportion of 'greater than \$15 000 income household members' on coach compared to rail could be partly attributed to coach fares generally being higher than rail fares in 1978 (see Tables 2.5 and 2.7) and greater availability of concession fares on rail. Car travellers represent an intermediate market, with higher incomes than coach or rail travellers but less than air travellers.

Table 2.10 shows the age of travellers by vehicle type used. Air travellers are shown to have a relatively constant proportion from each of the age groups used. Both rail and coach have a high proportion (over 60 per cent) of their passengers in the young and old age groups but relatively few in the 25-59 age group.

The under-16 year olds are the greatest proportion of car travellers. The proportion in each age group decreases as age increases. This trend follows ABS estimates (ABS 1982) of the population in each age group in 1978.

The NTS found that a large proportion of coach and train travellers are those looking for work, are retired or are students. These people are usually entitled to concession fares (in particular for rail journeys) and form 38 per cent and 55 per cent of coach and train travellers respectively. In contrast they formed only 16 per cent of air travellers and 28 per cent of car travellers.

The travellers in the various vehicles can also be compared by their journey purpose. Table 2.11 shows the percentages who were travelling for business and private reasons such as visiting friends, recreation, holidays or personal affairs. The unaccounted for percentage of travellers are those who did not state the reason for the journey or who responded in an unclassified 'other' category. The coach, train and car markets are roughly similar with around 80 per cent of trips being for private reasons. The air market is very different with only 53 per cent of journeys being for private purposes and 40 per cent for business.

TABLE 2.9-TRIP PROPORTIONS BY INCOME AND VEHICLE TYPE, 1977-78
(per cent)

Household Income (\$)	Vehicle type				Households
	Aircraft	Coach	Car	Train	
0- 2 000	2	0	1	4	4
2 001- 4 000	3	14	3	16	10
4 001- 6 000	3	14	5	16	8
6 001- 8 000	5	9	8	12	12
8 001-10 000	7	14	13	12	33
10 000-15 000	18	18	27	20	
15 001-20 000	23	14	19	8	22
20 001-25 000	13	9	12	4	
25 001-30 000	10	5	6	4	
30 001+	15	5	7	4	

Note: The figures may not add up to 100 per cent in each column owing to respondents not declaring their income or the mode used, to other modes being used or as a result of rounding.

Source: BTE (1981).

TABLE 2.10-PERSON TRIPS BY AGE OF PERSON TRAVELLING AND VEHICLE TYPE,
1977-78
(per cent)

Age of person travelling (years)	Vehicle type				Population
	Aircraft	Coach	Car	Train	
0-16	11	20	27	19	45
17-24	10	18	14	13	15
25-29	10	4	10	5	
30-34	11	5	9	6	12
35-39	10	5	7	3	
40-44	10	3	6	4	12
45-49	9	5	6	4	
50-54	11	5	7	8	5
55-59	7	6	5	6	
60+	12	30	9	33	13

Note: Figures may not add to 100 per cent in each column due to rounding.

Source: BTE (1981).

TABLE 2.11—JOURNEY PURPOSE OF TRAVELLERS, 1977-78
(per cent)

Purpose	Vehicle			
	Coach	Train	Car	Air
Business	6	9	12	40
Private	80	83	82	53

Note: Figures may not add to 100 per cent in each column due to rounding, non response or a response in the 'other reasons' category.

Source: Derived from BTE (1981).

The four characteristics used to compare travellers who responded in the NTS showed that coach and train transport attracts similar travellers. That is, more members of the lower household income groups, the under 24 and over 60 age groups, travellers on non-business travel and those entitled to concession fares.

Surveys of air and coach travellers

As part of a BTE study to examine the passenger response to the introduction of discount airfares, a survey of airline passengers was carried out in November 1983 (BTE 1985a). The survey consisted of 4782 interviews of passengers travelling between Sydney and Melbourne or Sydney and Brisbane by Ansett Airlines of Australia (AAA), Trans Australia Airlines (TAA) or East-West Airlines (EWA). In addition, Ansett Pioneer passengers on interstate coach services passing through Canberra were surveyed in the period 5 January to 10 February 1984.

In total 450 completed questionnaires were returned by coach travellers.

The two surveys allow the characteristics of air and coach passengers to be compared. As well, the differences between passengers on the major airlines (AAA and TAA) can be compared with those on EWA. At the time of the survey AAA and TAA had introduced a new class of discount fare (45 per cent discount) in addition to their normal fare. EWA offered an excursion fare that was approximately equivalent to a 47 per cent discount off the AAA and TAA economy fares. Unlike AAA a TAA, EWA did not have limitations on the number of seats available at this fare (other than the capacity of the aircraft).

The household incomes of coach passengers are shown in Table 2.12 and the household incomes of air travellers shown in Table 2.13. They show that the coach travellers came from lower income households than air travellers. EWA attracts a greater proportion of low income travellers than do AAA and TAA but EWA passengers generally have a higher income than coach travellers.

The ages of coach and air travellers are compared in Table 2.14. This shows that coach travellers are generally younger than air travellers and EWA serves an intermediate age market as their travellers are younger than the established airline market but older than the coach market.

TABLE 2.12-HOUSEHOLD INCOME OF COACH TRAVELLERS, 1983-84

<i>Household income</i> (\$ per week)	<i>Per cent</i>
less than 116	23
116-230	17
231-345	21
346-423	8
424-500	9
501-650	9
greater than 650	13

Source: BTE (1985a).

TABLE 2.13-HOUSEHOLD INCOME OF AIR TRAVELLERS, 1983-84
(per cent)

<i>Household income</i> (\$ per week)	<i>Route</i>			
	<i>Sydney-Melbourne</i>		<i>Sydney-Brisbane</i>	
	<i>EWA</i>	<i>Total</i>	<i>EWA</i>	<i>Total</i>
less than 100	15	2	14	5
100-400	38	16	49	21
400-649	30	34	33	28
greater than 649	16	48	4	47

Note: Figures may not add to 100 per cent in each column due to rounding or non response.

Source: BTE (1985a).

Table 2.15 shows the purpose of travel classified into business and private reasons. Coach and EWA travellers are shown to travel for mainly private reasons while the majority of travellers in the total airlines market are travelling for business purposes.

The sex of passengers clearly distinguishes the various markets. Female passengers form about 60 per cent of coach travellers, approximately 50 per cent of EWA passengers and just over 20 per cent of the total airline market.

TABLE 2.14-AGE OF TRAVELLERS, 1983-84
(per cent)

Age	Air route				Coach
	Sydney-Melbourne		Sydney-Brisbane		
	EWA	Total air	EWA	Total air	
<15	1	-	-	-	8
15-19	4	1	10	5	17
20-29	27	16	29	19	25
30-39	23	31	12	26	11
40-64	34	48	31	47	27
>64	12	3	19	4	11

- nil or rounded to zero

Note: Figures may not add to 100 per cent in each column due to rounding or non response.

Source: BTE (1985a).

TABLE 2.15-PURPOSE OF JOURNEY, 1983-84
(per cent)

Purpose	Air route				Coach
	Sydney-Melbourne		Sydney-Brisbane		
	EWA	Total air	EWA	Total air	
Business	23	77	5	71	3
Private	72	22	87	27	92

Note: Figures may not add to 100 per cent in each column due to rounding, non response or a response in the "other reasons" category.

Source: BTE (1985a).

Air travellers are further examined by type of fare paid in BTE (1985a). The detailed comparison shows that discount air travellers on AAA and TAA have the same socio-economic characteristics as EWA. It also shows that first and economy class passengers are even further separated from coach travellers in terms of their income, age and journey purpose.

Overview

The two sets of data are not directly comparable owing to the time difference and the restriction of one study to one or two routes as opposed to the other being directed to any journey over 100 kilometres in length. Nonetheless the basic conclusion, supported by both sets of data, is that coach travellers tend to come from lower income households, be under 25 or over 60 years old, travel for private reasons and are in the groups entitled to concession fares. They are similar to train travellers but distinctly different to air and car travellers, thus demonstrating a degree of market segmentation.

A United States of America (USA) study (Interstate Commerce Commission (ICC) 1984a) found that their coach travellers have basically the same demographic characteristics, but that train travellers in the USA were very different from the coach travellers, a situation in contrast to the Australian experience.

RELATIVE SIZE OF INDUSTRY

The number of passengers carried on intercapital journeys by scheduled coach, rail and aircraft services between 1980-81 and 1984-85 are shown in Table 2.16. There are at least twice as many coach as rail passengers, with rail experiencing a continuous decline in passenger numbers and coach increasing by at least 60 per cent (Australian Standing Committee on Tourism 1984) and possibly more between 1980 and 1985¹.

Air travel is clearly the dominant hire and reward mode for intercapital travel but around 75 per cent of air travellers travel for business purposes (see Table 2.15). As over 90 per cent of coach passengers have private reasons for travel, it is apparent that for non-business intercapital travel the air and coach industries carry roughly the same number of passengers. This shows the importance of the coach industry to tourism, an aspect that is often overlooked.

1. Industry sources believe that growth in the coach industry since 1980 has been at least 100 per cent and possibly much more.

TABLE 2.16-INTERCAPITAL PASSENGER JOURNEYS, 1980-81 TO 1984-85
(100 000 journeys)

<i>Year</i>	<i>Coach</i>	<i>Rail</i>	<i>Air</i>
1980-81	na	9.8	71
1981-82	na	9.5	72
1982-83	na	8.6	65
1983-84	na	8.4 ^a	67
1984-85	17 to 20	na	na

a. ARDDO (in BTE 1985b) estimated only 680 000 interstate rail journeys in 1983-84 after allowing for intrastate passengers on interstate trains.

na not available

Sources: BTE estimates. Department of Aviation, *Air Transport Statistics* (1984). Derived from railway annual reports.

CHAPTER 3-EXPRESS COACHES: COSTS AND REVENUES

COSTS

Costs associated with operating an express coach service can generally be classified into one of four categories; namely driver wage costs, capital costs, operating costs and overhead costs, (which include terminals, administration and advertising). The main considerations involved in each case are discussed below.

Driver wage costs

There are generally two methods of deploying drivers engaged on intercapital express operations. First, and most commonly, drivers are deployed on a 'driver-staging' basis. As a result of restrictions over the period of time for which any one driver is able to drive in a given twenty-four hour period, (see Chapter 4), drivers are accommodated at various staging locations along a route. This allows a changeover of drivers at strategic points and ensures that drivers are rested to at least the level required by the regulations. For example, on the Sydney-Brisbane route the staging point could be at Tamworth. This would enable a driver setting out from Sydney to change at Tamworth and rest overnight, ready to change with another driver on the return journey from Brisbane to Sydney.

The other method of employing drivers is referred to as the 'two-up' system. With this system two drivers are on board at any one time. While one is in the driver's seat the other is able to sleep or rest in a bunk converted from the back row of seats. This enables the drivers to operate in shifts during the journey and so conform to the regulations without the need for drivers to stay in accommodation somewhere along the route. This practice is not allowed in Queensland.

Awards

Arrangements for long-distance express service work using staged-drivers are covered by the Transport Workers (Passenger Vehicles) Award 1984 in its provisions for shift work.

Until recently the only award relevant to two-up driving, the Transport Workers (Passenger Vehicles Two-Person Operations) Award 1984, was for coach services in remote areas and restricted to a limited number of respondents. As this remote area award is not applicable to this investigation into intercapital services, it is not considered further.

Deluxe, the major user of the two-up system, employs its drivers under a private agreement for two-up operations in the more populated areas of Australia. This has been the subject of hearings in the Australian Conciliation and Arbitration Commission (ACAC). On 26 June 1985 Commissioner Sheather introduced a new interim award for two-up driving in non-remote areas. At the time of writing this had been appealed by Deluxe and the final outcome is uncertain.

Under the Deluxe system the driver is paid the single driver award without penalties or shift allowances and the resting or sleeping driver is paid 70 per cent of that award. To eliminate the weekly variation in wages received by drivers as a result of working different shifts, Deluxe uses a system of paying drivers a daily rate for each route. This rate averages out variations incurred by working on weekends and public holidays, and was established in agreement with the drivers.

The new award for two-up driving requires both drivers to be paid the staged-driver award rate but without shift loadings and with reduced Saturday and Sunday penalties.

Much of the criticism levelled at the use of two-up driving has stemmed from the argument that, in the past, two-up driving has provided operators with a lower driving cost alternative, enabling them to provide a lower fare structure. The Transport Workers Union (TWU) has even gone so far as to suggest that the new discount fares available are simply cross-subsidised from lower driver wages (Monaghan 1984).

On the other hand, Deluxe has countered this argument with the claim that the costs associated with two-up driving are similar to those of driver staging.

The question of penalty rates, overtime and the employment of drivers on a subcontractor basis has also arisen in the context of driver costs. There have been claims in the press that, whilst Greyhound and

Ansett Pioneer have paid their drivers over-award wages, the newer low fare operators have 'been paying drivers a set wage with no penalty rates' (Monaghan 1984).

The TWU has also alleged that drivers have been engaged as 'subcontractors' rather than employees, thus enabling the operator to circumvent conditions set down in the appropriate employee award.

Case Study

To compare the costs of the different ways of employing drivers, a case study of coach operations between Brisbane, Melbourne and Perth is described in Appendix II. Deluxe services with daily departures from Brisbane and Perth were used for the calculation.

The three driver employment systems examined are: staged-driving, the Deluxe system and the new two-up award. Wages, payroll tax, workers compensation, leave and accommodation costs are included to allow total driver costs to be calculated. Table II.1 shows the results of calculating the driver costs with wages based on the 1984 award of \$272.10 for 40 hours.

The basic conclusion is that total driver costs are lowest with a staged-driver system. The Deluxe system is 6 per cent more costly and the new two-up award is an additional 22 per cent higher than the Deluxe system. Overall the new two-up award costs are 29 per cent higher than the staged-driver award. These findings are in agreement with Commissioner Sheather in that the rates paid by Deluxe were higher than would be the case if they used staged operations but were lower than the new two-up award.

This is not necessarily true for all routes and Deluxe, in their submission to the ACAC, calculated an overall increase of 18 per cent in driver wages for the part of their network where two-up drivers are used.

The table also shows that two-up driving allows fewer drivers to be employed and that these drivers have higher wages than drivers under the staged-driving award.

An additional potential cost is the loss of revenue due to the removal of seats to provide a bunk, but this would only apply during peak loadings, hence it would have little or no effect during most of the year.

Capital costs

Capital costs, for the purposes of this section, refer only to the actual cost of acquiring a new or second-hand coach. Coaches can be acquired by outright purchase or by lease arrangements.

There are three main sources of finance for the purchase of new and used coaches: business or term loans from trading banks, equipment finance from the Commonwealth Development Bank and lease finance from finance companies. Term loans are made for fixed periods, usually ranging from three to 10 years and are amortised by regular instalments. Lease financing differs from equipment finance and term loans in that the title of ownership of the goods remains with the finance company unless the option to buy at the end of the lease period is taken up by the lessee.

One of the major advantages of lease finance is that the lessee is able to acquire equipment necessary for the operation of the business with only a minimal cash outlay. Another advantage is that the lessee is able to obtain a full tax deduction for monthly lease payments thus reducing the after-tax cost of the capital item.

A vehicle lease is essentially a short term lease, in general over three to five years. This usually covers most of the economical life of the vehicle, after which maintenance costs are expected to increase, particularly if it is still used in a heavy usage express coach operation. As part of the lease agreement a residual value is determined. This provides an option for the lessee to buy the asset at the end of the lease period for this predetermined value. Residual values are usually set at between 10-30 per cent of the value of the asset so at the end of the lease period the lessee can purchase the asset for this amount. This also provides significant scope for the operator to make a capital gain.

Take, for example, a new coach purchased in 1980 for \$160 000 with a 25 per cent residual and a four-year lease arrangement. The residual value of this coach is \$40 000. Although the price of second hand coaches will vary greatly with the quality of the individual coach it would appear from the trade literature that prices for 1978, 1979, 1980 and 1981 luxury coaches in 1984 are generally in the order of \$80 000 to \$100 000. Later model Denning Tourmasters and Denair's have been advertised for as much as \$140 000. This represents a considerable capital gain over the residual value determined under the lease agreement.

The portion of total costs attributable to capital costs will vary greatly between the operators, depending on the average age of the fleet. A fleet with an average age of only two or three years will have a higher repayment structure than a fleet which has an older age structure and possibly coaches which do not have any repayments owing. Offsetting this to some extent, a young fleet should have lower operating costs as a result of a lower maintenance requirement and possibly better fuel consumption.

Capital costs will also vary with the type of coach purchased and the interest rate applicable to the lease agreement.

With respect to the price of new coaches it would appear that at the end of 1984 luxury coach prices were in the range of \$200 000 to \$300 000. For example, the new MCI9's imported from Canada by Ansett-Pioneer during 1984 were reported to be valued at around \$250 000 each, while the new twin deck coaches used by AAC and Boznjaks of Sydney have been advertised from around \$280 000 under lease. New Denning Tourmasters (used by Deluxe and VIP) cost over \$200 000.

For illustrative purposes, capital costs for the case study example (Appendix II) are based on nine coaches, three of which were purchased in 1981 at a cost of \$175 000 each, three in 1983 for \$210 000, and three in 1984 at a cost of \$250 000. All coaches are assumed to have been purchased under five-year lease agreements with a 25 per cent residual. The lease agreements are based on interest rates of 20, 17 and 15 per cent for the respective years 1981, 1983 and 1984.

Capital costs are estimated to also include government insurance and registration as well as extra private insurance.

Under these arrangements the total capital cost is calculated at \$10 300 per week, or 13 cents per kilometre. As an example of the dependence on fleet age, if all nine coaches were purchased in 1981 the weekly cost would be \$9 300 and if they were purchased in 1984 this rises to \$11 400.

Operating costs

The major components of operating costs are fuel, oil, tyres and maintenance. There does not appear to be much scope for a significant variation in operating costs between operators as the prices paid for the fuel, oil and tyres are similar for all operators. Discounts are available for fuel, oil and tyres although it would be expected that

these would also be similar for the major operators. The main areas in which operating costs could vary are in either the consumption rates of these items or in maintenance costs. Differences in maintenance costs could be due to either the requirements of an older fleet or the implemented preventative maintenance policy.

To provide an estimate of operating costs fuel, oil and tyre costs have been estimated using November 1984 prices, associated discounts and average consumption rates.

Although fuel consumption will vary among operators and even among vehicles in the same fleet, industry sources suggest that most operators would aim at fuel consumption of around 36 litres per 100 kilometres with a usual range of between 26 and 56 litres per 100 kilometres. For case study purposes a consumption rate of 40 litres per 100 kilometres was chosen to represent an average rate. The fuel price used is an industrial price less a three cents per litre trade discount. Oil consumption is estimated to be 2 litres per thousand kilometres. The combined cost for fuel and oil is estimated at 19 cents per kilometre.

Tyre life is assumed to be in the order of 220 000 kilometres which includes two recaps. Total tyre cost is based on the fleet price for '10.00 x 20' steel radials. Under these conditions total tyre cost is estimated at between 2 and 3 cents per kilometre.

Maintenance costs are based on Victorian Transport Regulation Board (TRB) figures for country service operators compiled from uniform financial returns. The maintenance expense is the Victorian TRB figure for June 1980 indexed to a 1984 value using the transportation component of the Consumer Price Index (CPI), and is 13.0 cents per kilometre. Although the Victorian TRB figures are aggregate figures for country service operators (of which 64 per cent of kilometres are accounted for by route, charter and touring operations) they are expected to provide a reasonable estimate for express operations.

Estimates derived from the case study example show operating costs in total to be around 34 cents per kilometre.

Overheads

Overhead costs refer to a range of items such as administrative salaries, accommodation expenses, terminal lease and maintenance costs, advertising, electricity, telephone, stationery and booking facilities, and so on. Hence it is difficult to estimate costs

attributable to overheads. There are also difficulties due to the wide variation of item costs among the various operators. Two examples of such items are administration and terminals. Terminal costs vary markedly depending on location, number of terminals, furnishings, size of terminal, and other items. Administrative costs will vary with the management structure, and in particular, whether or not there is a well developed pyramidal management structure, possibly with sizeable state or branch offices, or a simple structure based in one or two offices.

There is potentially a large variation in overhead costs which may account for many of the differences between cost structures, particularly between the newer discount operators and the older established operators. Consequently, it is one area in which there is scope for the discount operators to lower costs and thus enable them to compete by offering lower fares. It would appear that the established operators have built up larger administrative networks and operate a more extensive network of terminals than discount operators, who have a smaller number of terminals located in less central areas or share facilities with other operators. In Canberra, for instance, Ansett Pioneer operate their own terminal facilities while the other companies generally use facilities in a shared coach terminal. The discount operators also use kerbside pick up and set down to a greater extent.

The salary component of overheads includes all wages other than drivers and maintenance staff and so includes the wages of booking clerks, cleaning staff and general administrative staff. Industry experience suggests that there is usually a one-to-one ratio between driving staff and the number of administrative and back up staff.

Expenditure on advertising is another area of overheads in which there is variation. The discount operators generally rely on only a small amount of advertising, claiming this as one factor enabling them to maintain a lower fare structure. On the other hand, Greyhound has been maintaining a high level of advertising, emphasising the quality of their service rather than their fare levels. The use of a high public profile, based on quality of service, is being used to supplement their established goodwill in seeking to maintain their share of the passenger market.

As a result of the variability in overheads, no estimate is included in the case study costings. Instead, the calculations in Appendix II show the margin between estimated revenue and the total of other

costs. This provides an idea as to the overheads which could be absorbed under the given fare levels.

REVENUE

Apart from fares charged, there are a number of other factors which must be taken into account when considering or estimating revenue in the industry. These include factors such as occupancy rates, the breakup between adult and concession fares, the effect on seating capacity with two-up driving, and the loss of revenue due to payment of commissions for bookings made through travel agencies.

Occupancy rates

Along with fare levels, occupancy rates are the single most important determinant of revenue. It has been reported that VIP consider an occupancy rate of 85 per cent, or 38 seats filled out of 44, essential before breaking even on their operations (Monaghan 1984).

Information on actual occupancy rates is generally not publicly available, so it is necessary to estimate an overall occupancy rate for coaches on intercapital express routes. From discussion with operators and BTE observations an average occupancy rate of 75 per cent was estimated and is assumed in subsequent analysis. Over the peak Christmas-New Year holiday period it was estimated that the occupancy rate would increase to around 90 per cent, although it would appear that in many cases occupancy would reach 100 per cent during this period. Notwithstanding this, a conservative estimate was chosen to allow for variation during the six-week peak period.

Breakup between adult and concession fares

In the cases where operators issue concession fares there will be a reduction in revenue. This factor must be taken into account when estimating revenue over a given route. For example, Ansett Pioneer offer a 10 per cent reduction for concession fares on some routes and a 20 per cent reduction on others. Greyhound also offers concession fares, but, this will not affect the discount operators Deluxe and VIP who do not offer concession fares on most of their interstate services.

Reduction in seating capacity due to two-up driving

Because the two-up driving system relies on the conversion of four rear seats into a bunk there will be a reduction in seating capacity. However, this will usually only be disadvantageous to the operator in

peak periods when these four seats have the greatest potential to be occupied.

Loss of revenue from travel agency bookings

Where coach bookings are made through travel agencies it is normal practice for the agency to collect a fee of up to 20 per cent of the fare.

PROFIT MARGIN

As can be seen from the case study results (Appendix II), if staged-drivers are used, the respective margins under the \$159.00 and \$206.00 fares are 29 and 50 cents per kilometre. Under the new two-up award, the margins are 25 and 45 cents per kilometre respectively. Under the various driver employment schemes the margins cover the range from one to two million dollars annually. Thus, overheads must fall within this range to ensure that the operator at least breaks even, noting also that any profit must come from there.

It can generally be concluded that most of the differences in fares between the operators can be explained by differences in overhead costs and drivers' wages. It is significant that it is the newer entrants to the industry operating under lower overhead structures who are offering the lower fares, whereas the older more established operators, whilst having reduced prices since 1980, have not chosen to compete on price but have preferred to compete on the basis of quality.

Although the above case study assumes that the coaches are leased, the operators with older equipment will have either completed any lease many years ago or purchased the coach outright. This eliminates any capital costs associated with coaches in that situation, although maintenance costs may be higher. These operators are now purchasing new coaches which will increase their capital costs with full re-equipment, putting them in a similar position to that described in the case study.

CHAPTER 4-THE INSTITUTIONAL FRAMEWORK OF THE LONG DISTANCE COACH INDUSTRY

The aim of this chapter is to provide an overview of the current dimensions and nature of the institutional framework affecting the long distance coach industry. At the outset, it should be noted that at the interstate level the industry is free from any form of quantity (economic) regulation, as a result of the High Court's interpretation of Section 92 of the Constitution. On the other hand, the intrastate industry can be differentiated from the interstate by the fact that it is commonly subject to extensive economic controls in terms of entry, route, schedule and price controls; safety regulations apply equally to both segments.

The institutional framework in which operators function has developed largely as a result of government actions over the years. Government regulatory response to the development of long distance coach services began to appear throughout Australia after World War I. The growth of road transport operations developed quickly as a competitive challenge to publicly-owned railway systems. Consequently, economic regulation of road transport within Australia began primarily in the late 1920s and early 1930s when State governments moved to restrict the competition between road and rail transport, which they perceived to be detrimental to the financial stability and economic viability of the railways.

The first State to regulate the coach industry comprehensively was Tasmania. By way of its *Traffic Act* 1928, it instituted regulation and licensing of privately-owned coach and bus services with the stated purpose to "ensure the avoidance of 'unfair and wasteful' competition". The other States also chose to regulate and co-ordinate privately-owned coach services a few years later with the passage of Transport Co-ordination Acts or similar legislation such as the South Australian Road and Railway Transport Act, 1931. In terms of road safety, the various legislative changes incorporated in the States' Co-ordination Acts further assisted earlier Traffic Acts which had required licensing of vehicles and drivers and limits according to weight, passenger numbers and speed. Third party insurance also became a requirement as in the Queensland *Motor Vehicles Insurance Act*

1936, in which the owners of vehicles for carriage of passengers were required to take out an insurance policy per passenger to cover liability.

In 1954, the States' powers to regulate interstate road transport were challenged by Hughes and Vale Pty Ltd in the Privy Council. The Council's favourable judgement was subsequently upheld by the High Court in 1955 and consequently the interstate road transport industry has been free from all forms of economic regulation from that date (*Hughes and Vale Pty Ltd (No.2)* (1955) 93 CLR127).

This chapter describes the institutional framework of the industry under four separate but interrelated headings. They are quantity (economic) regulation, safety standards, the provision of the road infrastructure system by government and the organisational setting of employers and employees within the industry.

QUANTITY (ECONOMIC) REGULATION

The constitutional basis of the powers for regulating this industry lies with the States and not the Federal Government. The focus of this section of the Paper is on outlining the forms which government economic regulations take and the specific arrangements which exist at the State level.

Regulatory forms

The form which quantity regulation takes is varied and includes controls over fares, hours of operation, number of services and routes served. Fare schedules are determined in all States by designated regulating authorities, according to more or less explicit guidelines (commonly on a cost-plus basis). Applications for fare increases are usually authorised only for individual services, in line with increases in operating costs. In New South Wales, for example, fare applications are weighed against a periodically updated Index of Omnibus Operators Costs which ensures that fare increases are common across the whole range of coach services. Nevertheless, it is worth noting that on some routes where additional operator licences have been granted such as Brisbane-Cairns, existing operators have applied for and been granted a fare reduction. The entry of a new operator charging a lower fare suggests that the administered fare was perhaps high.

State governments also commonly exercise tight control over the number of participants permitted to operate services on any route. This

applies equally to intrastate operators and interstate operators; the latter are generally denied pick up and set down rights within a State on interstate journeys, although some exceptions are made on routes between border localities and State capitals. The extent to which quantity control is used to preclude the operation of more than one operator on any route, however, varies between and within the States. Although Western Australia and Queensland appear to favour competition between private operators on some routes (such as Perth-Port Hedland and Brisbane-Cairns), 'parallel licensing' is not widely practised in the States.

Regulatory arrangements

It is worth noting that in the road freight industry, the States have progressively moved to dismantle the economic regulation of operators over the last two decades. A similar trend has yet to emerge in the coach industry at the intrastate level, where administrative controls remain dominant.

New South Wales

The State Transport (Co-ordination) Act, 1931, administered by the Department of Motor Transport (DMT), effectively provides a framework for the comprehensive control of all intrastate road transport in New South Wales. For the purposes of the Act, the Australian Capital Territory is deemed to be part of the State, an arrangement which is underlined by the fact that only one operator is at present licensed to carry passengers between Canberra and Sydney on an intrastate basis.

The specific thrust of the State Transport (Co-ordination) Act, 1931 is to regulate road transport in order to facilitate the financial success and survival of the State Rail Authority (SRA). This Act is complemented by the Transport Act, 1930 which specifically deals with the three designated Transport Districts (Metropolitan, Newcastle and District and Wollongong), the Motor Traffic (Further Amendment) Act, 1983 and a variety of specific technical traffic regulations concerning road transport in New South Wales. In keeping with this tight control, interstate operators have limited pick up and set down rights within the State.

Recently, sole control of public motor vehicles in country areas has been given to the Commissioner for Motor Transport by the State Transport (Co-ordination) Amendment Act, 1980 and the Local Government (Public Vehicles) Amendment Act, 1980. Previously, the licensing and control of country road services had been a shared responsibility

between local government authorities and the Commissioner. The Act enables regulation of conditions of entry, rates, fares, taxes and fees. Licences are still only issued for journeys not exceeding 80 kilometres in length, or for those that do not compete with an existing railway service. It should be noted, however, that many of the Co-ordination Act's specific provisions are no longer used.

Victoria

Under the general planning umbrella of the State Transport Authority (STA), the Road Traffic Authority (RTA) administers a compulsory licensing system of commercial passenger operations, according to the *Transport Act* 1983. The objectives of the Authority's activities are to assist in the balanced use of transport resources, specifically through licensing, to meet public transport needs. In addition to these regulatory functions, the Authority also provides registration and licensing procedures and systems for motor vehicles and drivers.

In practical terms, the RTA will grant a licence if the operator can show the economic viability of the service, a benefit to the community from the service, no disbenefit to existing services and the capacity to meet required service and safety standards. Although there is no specific reference in the Act that would preclude competition with rail, the third condition represents an implicit hurdle since existing operators, including V/Line, are able to lodge appeals against a licence application. In this context, it is interesting to note that V/Line currently subcontracts some of its routes to private coach operators, who receive a subsidy to ensure that suitable standards of service and equipment are provided.

Queensland

The regulating function for public vehicles in Queensland is carried out by the Commissioner for Transport. Subject to the *State Transport Act* 1960-1981, vehicles used in certain districts on specific routes for the purpose of carrying passengers under licence or permit must be approved by the Commissioner. Licences are usually granted for a period of seven years.

Coach services are permitted to compete with almost all rail passenger services. This competition is heaviest along the Queensland coast and along the *Westlander* (Brisbane-Quilpie), *Midlander* (Rockhampton-Longreach) and *Inlander* (Townsville-Mt Isa) routes. In addition, routes may be restricted to one operator only, such as Cairns to Karumba, or most recently, be open to multiple operators, such as Brisbane to Cairns. This direct competition between road and rail, however, is tempered by restrictions on some routes which do not

permit operators to set down passengers on forward journeys or pick up passengers on return journeys.

In common with some other States, operators are charged licence fees. These fees are based on two calculations: a percentage of gross fare revenue, ranging from 2.5 per cent to 7 per cent depending on the route and a fixed charge which varies from 0.4 cents on coastal routes to 0.3 cents per passenger per kilometre on inland routes. Revenue from these fees has almost doubled since 1979, from \$662 000 to \$1 125 000 in 1984, an increase which reflects a growth in passenger numbers as well as fare rises.

South Australia

Since 1981 the Department of Transport's Road Safety and Motor Transport Division has exercised complete regulatory control over intrastate road transport in South Australia. The objective of this control is to co-ordinate public transport services by the licensing of operators under the Road Traffic Act, 1961-1981. The Act provides for the issue of a licence on the basis of the suitability of the applicant, the safety of the vehicle, the suitability of the vehicle for the operation, the transport requirements of the public in the area to be served, the conditions of the roads in the area, and any other matter that the Minister considers relevant.

A review of coach services and the regulations governing them has recently been completed in South Australia. The existing regulatory system was examined with particular emphasis on its objectives and how these could best be achieved (BTE 1985b).

Western Australia

The licensing of services and regulation of fares and fees is the responsibility of the Commissioner of Transport under the *Transport Act, 1966-1981*. Licences can be obtained either by satisfying operational criteria, or by tendering for a service which is deemed necessary by the Minister. Within these conditions, the same principles that apply to other States can be discerned, namely, the provision of transport services for the public good, the prevention of competition and the protection of existing services.

The rationalisation which has taken place in Western Australian rail passenger services during the last decade has resulted in a more liberalised system of licensing. Restricted approval has been given by the Commissioner of Transport for Greyhound, Ansett Pioneer and Deluxe to operate on a number of specific routes in the southwest of the State, which do not conflict with Westrail coaches, as well as

between Perth and Port Hedland. However, it should be noted that when Deluxe requested permission to carry passengers between Perth and Kalgoorlie on their interstate services, this was refused as their services conflicted with the Westrail *Prospector* rail service (Western Australia Transport Commission 1984).

Tasmania

The licensing and regulation of privately operated coach services in Tasmania is vested in Transport Tasmania (Department of Transport) under the powers of the *Transport Act* 1981 and the *Traffic Act* 1925. The functions of Transport Tasmania cover registration of motor vehicles, licensing and regulation of commercial road passenger transport, testing and licensing of drivers, provision of road safety policy advice and support, and advice on motor vehicle design.

Regular rail passenger services in Tasmania have been abandoned completely for some time, obviating the need for limiting competition, between road and rail services by legislation. Previously, the Traffic Act ensured the avoidance of 'unfair' and 'wasteful' competition by giving both the State owned railways and licensed road operators a measure of protection. Currently, the two major coach operators are encouraged to compete on some routes, notably between Hobart and the northern centres of Launceston, Devonport and Burnie.

Northern Territory

The Land Group of the Department of Transport and Works is concerned with the review and administration of the *Motor Vehicle Amendment Act* (No. 2) 1981, the *Control of Roads Act* 1981 and the *Traffic Act* 1981. Licensing is only required for the carriage of goods using locally registered vehicles; it is not used to control entry to the commercial transport industry or to monitor its performance.

SAFETY STANDARDS

Safety standards of the long distance coach industry are underpinned by a large body of regulations covering hours of driving, vehicle design and operation. A further dimension to this type of regulation has been proposed by the introduction of a system of quality licencing of road freight transport operators (see National Road Freight Industry Inquiry (NRFII) 1984) which has relevance for the coach industry, given that it is an integral part of the road transport industry. At the time of writing, the Interstate Road Transport Bill 1985 containing this type of provision was being debated in Federal Parliament. Quality licensing is viewed by its proponents as being a more effective instrument for promoting road safety than economic

control of entry to the road transport industry, which is largely seen as being ineffective (see McDonnell Report 1980). The NRFII (1984) suggested that safety standards could be improved by ensuring that:

- . all those entering the industry are adequately equipped with the skills necessary to operate trucks safely; and
- . employed drivers, together with owner-drivers and other operators, conform over a period to well-judged and appropriate safety standards in their business activities.

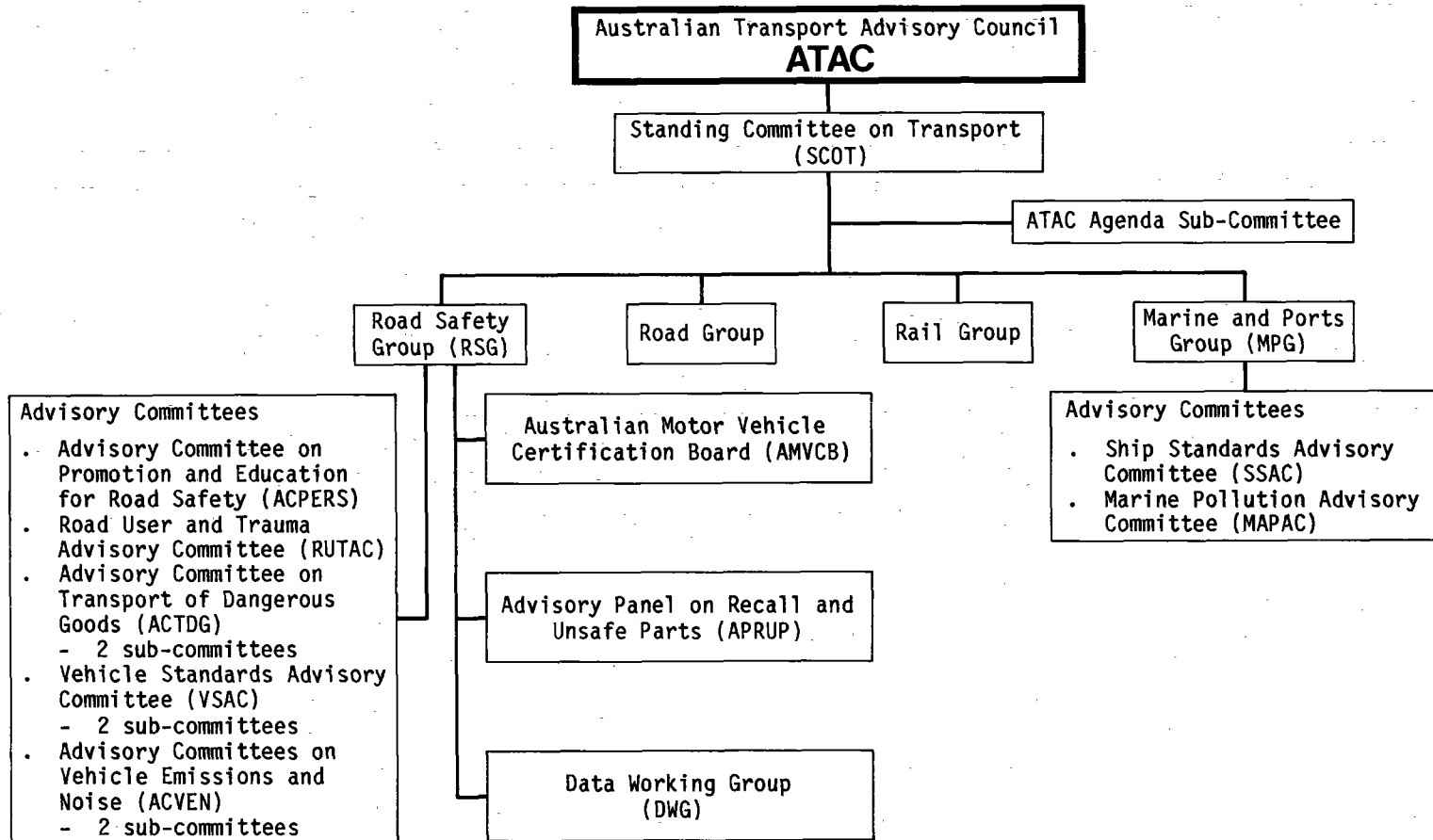
Suggested criteria laid down for quality licensing schemes appear to be slanted not only toward safety but are also implicitly associated with economic aspects of operator behaviour. It can be argued that this approach represents no more than another form of *de facto* quantity control of entry to the industry. The actual extent to which any form of quality licensing can be implemented, however, appears to be severely constrained by previous High Court rulings on the scope of reasonable regulation permitted by Section 92 of the Constitution (see Attorney-General's Department advice to NRFII (1984)).

Considerable efforts at the inter-governmental level have over recent years been made to standardise laws and regulations pertaining to the safe operation of road transport services. The principal national advisory body responsible for the co-ordination of transport matters is the Australian Transport Advisory Council (ATAC) which is comprised of Federal, State and Territory Ministers of Transport. Figure 4.1 outlines the overall organisational structure of ATAC as well as detailing the major advisory and technical groups and committees which have relevance to the coach industry. The policy advisory group most relevant to the coach industry is the Road Safety Group (RSG), comprising State officials from the motor vehicle safety and regulatory areas, together with Federal Government representatives. In turn, RSG is advised by a number of technical committees which are detailed in Figure 4.1.

The elements of safety regulations comprise driver performance standards (speed limits, hours of driving and licensing) and technical aspects associated with the vehicle (for example, vehicle limits and maintenance requirements). These are outlined below.

Driver performance standards

Regulation with regard to speed limits, hours of driving and driver licensing were designed to control the actions of participants within the long distance coach industry. However, given the incompatibility



Source: ATAC.

Figure 4.1-Organisation of ATAC

of licence classes within Australia, enforcement of regulations is difficult. Moreover, at present there are a number of licence classes in all States and Territories, ranging from 13 in Western Australia to five in the Northern Territory; most involve the taking of separate tests (DoT 1983). Few of these classifications are compatible across State and Territory borders. This situation is likely to change, however, as a result of ATAC's 1983 endorsement of a uniform code of driver's licence classifications.

Legislation governing hours of driving is also not uniform across Australia (see Table 4.1). The regulations covering hours of driving set maximum periods for hours of driving without rest periods and also stipulate minimum periods of rest. In terms of each driving period over 24 hours, the maximum driving time is 12 hours in New South Wales, Victoria, South Australia and Northern Territory, and 11 hours in Western Australia and Queensland. The regulations in New South Wales, Victoria and South Australia also require a driver to have a minimum of five consecutive hours of rest in a given 24-hour period; in Queensland, Western Australia and the Northern Territory the requirement is for 10 consecutive hours of rest in a 24-hour period. The difference among the States does not lie only in the form of

TABLE 4.1-HOURS OF DRIVING FOR HEAVY VEHICLES

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>NT</i>
Maximum continuous hours	5.0	5.0	5.5	5.5	5.0	..	5.0
Maximum aggregate in last 24 hours	12.0	12.0	11.0	11.0	12.0	..	12.0
Minimum consecutive hours rest in last 24 hours	5.0	5.0	10.0	10.0	5.0	..	10.0
Minimum rest period between continuous hours	0.5	0.5	0.5	0.5	0.5	..	0.5

.. not applicable

Source: Office of Road Safety (1983).

driving hours regulation, but also in the policing of these regulations. For instance, unlike the other States, both South Australia and Western Australia do not require completion of drivers' log books.

The National Road Traffic Code endorsed by ATAC in 1982 recommended absolute national speed limits of 60 kilometres per hour and 110 kilometres per hour in urban and rural areas respectively. States and Territories, nevertheless, are free to adopt their own limits within this general range, according to individual circumstances. However, not only is there a variation in limits generally but also a difference between road coaches and trucks, as illustrated in Table 4.2. It is worth noting that the NRFII recommended that all speed difference be removed, given the improvements in braking standards of vehicles generally as defined by Australian Design Rules (ADRs). However, subject to this recommendation being adopted, the Inquiry also endorsed the strict enforcement of speed limits and the ending of the practice of 'unwritten tolerances in relation to speeding' (NRFII 1984, p. 155).

Technical standards

The technical capabilities of vehicles are also regulated for safety purposes. Despite the considerable efforts that ATAC has made over the years to harmonise State and Territory vehicle limit

TABLE 4.2-NON-URBAN SPEED LIMITS FOR VEHICLES, ALL STATES AND TERRITORIES

<i>State/territory</i>	<i>(km per hour)</i>		
	<i>General limit</i>	<i>Coach limit</i>	<i>Truck limit</i>
New South Wales	100	90	80
Victoria	100	90	80
Queensland	100	100	90
Western Australia	110	90	80
South Australia	110	90	80
Tasmania	110	90	80
Northern Territory	No absolute limits		
Australian Capital Territory	As directed	As directed	50-80

Sources: NRFII (1984). Personal communication with DoT (1985).

regulations, there is still some variation in the technical regulations governing road passenger and freight vehicle dimensions.

While there are disparities among the States and Territories with respect to levels of permissible gross vehicle mass (gvm), it is doubtful whether this currently represents a significant impediment to the efficient functioning of the interstate coach industry. Nevertheless, it is worth noting that axle load limit differences in the past have posed a number of problems for long distance coach operators. Revised axle load limits which followed the Economics of Road Vehicle Study (NAASRA 1976) resulted in some long distance coaches being deemed to have non-conforming axle configurations. ATAC subsequently recommended that such coaches be allowed to continue to operate only until 31 December 1983.

The formulation of standards for the construction and performance of motor vehicles is one of the major concerns of ATAC. For example, ADRs contain specifications for the incorporation of safety features in vehicles which can contribute to the reduction of death or injury, or for the control of vehicle emissions and noise (NRFII 1984). At present, regulations exist in relation to:

- . the safety design of motor vehicles which can be verified by usual inspection or simple non-destructive testing at the point of registration and are not subject to ADRs;
- . the ongoing performance of ADRs including allowable deterioration and acceptable modification; and
- . the on-road operation of vehicles such as loading, noise, and so on (NRFII 1984, p. 67).

However, there are no ADRs in relation to coach structural strength or requirements for seat belts.

INFRASTRUCTURE

Governments, at all levels, have a major involvement in the long distance coach industry as providers of the road system. This responsibility is distributed between all three levels of government according to a relatively complex set of interactions which determine the financing of road investment. This section details the use made of the road system by the long distance coach industry, who provides the funds for that system and the contribution the industry makes to that funding.

In terms of the functional use made of the road system, it is worth noting that the road freight industry is the main commercial user, with long distance coaches making up only a fraction of total commercial use. BTE (1984b) estimated that there were 1.6 million light commercial vehicles and trucks, including 543 000 rigid and articulated trucks. In comparison, only approximately 1000 intrastate and interstate long distance coaches were estimated to operate in Australia (of these only 250 were interstate coaches). Some 90 per cent of interstate coach travel occurs on national highways while intrastate coach travel is fairly evenly divided between national highways and rural arterial roads.

The Federal Government assumed responsibility for all funding of construction and maintenance of the national highway system in 1974. For the purposes of the long distance coach industry, the main road categories used are national highways and rural arterial roads. In 1981-82 expenditure on these two categories accounted for 33.5 per cent of total expenditure by all levels of government. This was a considerable increase over the expenditure in 1972-73 which was 26.3 per cent. These figures show an increasing priority given to major interstate and intrastate roads. Since most of the real expenditure increase has gone to national highways, the interstate coach industry could be seen to have been greatly assisted in expanding its overall market. Federal Government funding under the Australian Land Transport Program (ALTP) and the Australian Bicentennial Road Development (ABRD) Program will total \$1 250 million in 1985-86. This expenditure will be allocated 45 per cent for national highways, and 20.3 per cent and 13.7 per cent for urban arterials and rural arterials respectively. In addition, 20.6 per cent is allocated to local roads with 0.4 per cent to road safety and transport research.

A major change over recent years affecting State road financing arrangements has been the progressive introduction of business fuel franchise schemes by all States except Queensland. Most schemes provide for a higher excise on diesel fuel than on petrol. In addition, States also recover part of their road costs from commercial registration and licence fees.

Under the ALTP, roads will be funded by an hypothecated and indexed fuel excise (3.799 cents per litres of 2 August 1985), which will raise in combination with the Bicentennial roads excise (2.0 cents per litre) an estimated \$1.5 million in 1985-86 from the interstate coach industry, plus an estimated \$800 000 from State fuel franchise schemes and registration and licence fees. ALTP legislation also provides for

funds to be diverted to interstate rail mainline investment which will aid the overall competitive position of this mode.

ORGANISATIONAL SETTING

The overall stability and economic performance of the long distance coach industry is significantly affected by its organisational and operational structure. The outstanding feature of the long distance coach industry is that its participants are on the whole drawn from the private sector. At the same time it operates within a complex structure of Territory, State and Federal Government intervention, both through direct regulation and the provision of the road system.

Like other components of the transport industry, the long distance coach industry is represented by organised employee and employer associations, together with a small but increasing number of subcontractors and individual owner-drivers. Employees are primarily represented by the TWU and the Federated Clerks Union (FCU) at both the State and Federal levels. Other unions which have an important impact on the industry are those involved in the mechanical and general cleaning duties at maintenance workshops. The most significant of the unions is the TWU which has a membership in excess of 100 000, of which an estimated 800 to 1000 members work in the long distance coach industry. The structure of the TWU is constituted around a federal organisation with State and Territory branches. The Federal TWU is registered under the *Commonwealth Conciliation and Arbitration Act 1904* as a trade union, and the State branches are also registered in terms of relevant State industrial legislation as trade unions. The process of dual Federal and State registration of unions has posed considerable problems for the TWU as evidenced by the outcome of the *Moore v Doyle* (1969) 15 FLR 59 case. The Court held in that case that the TWU New South Wales Branch was not a branch of the Federal TWU but a separate legal entity. The result was that the New South Wales TWU Branch split from the Federal TWU. This split between the organisations remained until early 1980 when the TWU New South Wales Branch re-joined the Federal TWU (BTE 1984b).

The principal Federal Award applicable to the long distance coach industry is the Transport Workers (Passenger Vehicles) Award 1984 (currently under dispute as detailed in Chapter 3), which is binding on the majority of employers outside New South Wales. In New South Wales, the relevant award is the Transport Industry - Tourist and Service Coach Driver State Award. This also covers owner-drivers, since the TWU is entitled to represent owner-drivers before special

arbitration tribunals which regulate the rates and conditions of owner-drivers subject to the New South Wales Industrial Arbitration (Amendment) Act 1979. States which have their own awards in addition to the Federal Award are Victoria (Motor Drivers Award) and Queensland (Motor Drivers, Etc Award, Southern Division and Passenger Vehicle Drivers, Etc Award, Northern and Mackay Divisions). South Australia, Western Australia and the Northern Territory operate under the Federal Award only.

Employer interests are promoted at the national level by the Australian Bus and Coach Association (ABCA) which acts as the umbrella organisation for the various State Bus and Coach Associations. The ABCA objectives are to promote and develop the bus and coach industry and to take any necessary action to give effect to this aim at the national level. Prior to the formation of ABCA, bus and coach proprietors were represented by the Australian Road Transport Federation. It is understood from industry sources that, on the whole, new entrants to the interstate long distance coach industry do not generally belong to the various State Bus and Coach Associations. This may in the longer term inhibit communications with government and present an impediment to solving industry problems.

CHAPTER 5-INDUSTRY STRUCTURE, PRICING AND PERFORMANCE

There have been major changes in the long distance coach industry since the late 1970s in terms of fare and quality differentials and industry efficiency. These changes can be attributed in part to the entry of new operators (notably at the interstate level) into an expanding passenger market. The actions of new entrants have contributed to stimulating the long distance coach industry market by the provision of new or additional services, often at fares significantly below those existing prior to their entry.

The enhanced level of competition existing in the interstate and some intrastate markets, notably the more heavily trafficked routes such as Brisbane-Cairns, has produced a number of favourable outcomes for consumers. Fares have shown a significant decline in nominal as well as real terms over those prevailing in 1980. In addition, availability and quality of services have improved with consumers having a much wider range of price and quality mixes to choose from to meet their specific travel requirements. At the same time, available statistical information on coach accidents does not point to any compromise of safety.

A somewhat different picture emerges in regard to much of the intrastate market where fares, levels and quality of services have not followed those of the interstate market. The major reason for this was considered to be the presence of a high level of government economic regulation and the relatively low density (thin nature) of a large part of the intrastate route network.

This chapter examines the long distance coach industry in terms of its structural attributes, pricing practices and the resultant performance of the industry in the market place. Structural attributes of the industry are considered with regard to entry and exit conditions and the possible competition from other modes. The behaviour of operators is discussed with respect to pricing practices, while industry performance is examined with reference to levels of service, industry concentration and stability, safety and fare levels.

STRUCTURAL ATTRIBUTES

The most significant structural characteristics of the long distance coach industry and the forces that give rise to shaping its competitive climate are outlined in this section, namely entry and exit barriers and modal substitution (that is, air, rail and car). Other structural attributes, such as the degree of seller and buyer bargaining power, have not been specifically considered, on the basis that the impact of these forces tends to be relatively modest in this industry.

The low entry and exit barriers, the availability of alternative modes and the general absence of economic regulation all combine to lay the foundations for a highly competitive interstate coach industry. In these aspects it differs significantly from intrastate operations, which are conducted in a more tightly controlled environment. This environment largely discourages competition, although there are indications that the situation may be changing.

Barriers to entry and exit

In order to understand the performance attributes of the long distance coach industry, it is useful to examine the market structure of the industry in relation to the existing barriers to entry and exit at both the interstate and intrastate levels. These barriers can be considered in terms of economies of scale, capital requirements and government regulation.

It appears that not only is the interstate coach industry competitive, but it also exhibits a number of the attributes of a highly contestable market on thin routes (see Baumol, Panzar and Willig 1982). The absence of entry and exit barriers combined with the highly mobile nature of the operators' capital enables operators to enter and exit from routes as financial conditions change. Operators appear to enter markets until such time as rates of earnings fall to those prevailing on other routes. Consequently, even on comparatively thin routes the threat of entry forces operators to price competitively.

At the intrastate level, the presence of high entry barriers in the form of government regulation offers the potential for high earnings. In reality, actual earnings may be considerably lower given that there may be a high degree of cross-subsidisation between routes and high compliance costs associated with meeting the requirements of regulation. Moreover, the high level of economic control in some

States is unlikely to produce conditions that favour route or service expansion into areas which have relatively low revenue potential (thin markets) in the absence of government-sponsored revenue-supported schemes.

Economies of scale

Economies of scale refer to the relationship between costs and levels of output, in particular, an increase of output associated with a proportionately lower increase of inputs. The presence of economies of scale acts to deter entry to an industry by forcing new entrants either to come in on a large scale or otherwise face a cost penalty. On the face of it neither of these outcomes appears relevant with regard to the Australian long distance coach industry. Observations on economies of scale in the provision of USA long distance coach services suggest that if scale economies do exist for some size ranges of coach firms, they cease to exist at output levels well below those demanded in national, regional and most local markets (ICC 1984). Investigations by Tauchen, Fravel & Gilbert (1983), examining the USA long distance coach industry, also found no evidence of scale economies for coach operators with revenue in excess of \$1 million per annum.

The apparent absence of scale economies in this industry is illustrated by the ease with which many new operators enter the industry with few coaches and commence operating on a single route, such as Aussie Express on the Adelaide to Sydney route. Any scale economies present in the industry apparently disappear beyond a relatively modest number of vehicles, which may be as low as one to two on particularly lightly trafficked routes. Nevertheless, it should be noted that larger firms may gain some financial advantages through the large scale purchasing of coaches, fuel, oil and insurance, but this advantage may be offset by the presence of generally higher overheads, particularly in regard to labour costs.

A related concept to scale economies is the notion of economies of scope, which are cost savings accruing to a firm by nature of its production of multi-outputs (Baumol, Panzar & Willig 1982). Scope economies appear in part to be present in some firms' operations, either by nature of their route network, such as in the case of through-routeing (which enables an operator to consolidate any interstate and intrastate services into a single service) or by involvement in other complementary activities (for instance, charter and tourist work). The significance of scope economies as an overall barrier to entry appears likely to have only a marginal impact and to be confined in the main to certain localised parts of the network. A

detailed analysis of the business undertakings of individual operators would be required for the extent of scope economies to be fully assessed.

Capital requirements

The running of express coach services involves capital outlays associated with the purchase of equipment and facilities. However, the need to invest to gain entry can be on a relatively modest scale, ranging from entry with one or two coaches (or using subcontractors) to entry with a national operation of 40 to 60 coaches. In terms of infrastructure requirements, minimal capital needs to be outlaid if travel agents are used for marketing purposes (in return for an agent's commission of usually 20 per cent), and if other coach operators' terminals or, indeed, street corners are utilised for pick up and set down. Even where operators have outlaid substantial capital for specific purposes such as coach terminals, these costs may be sunk only to a limited degree, since coach terminals can be converted from structures built for other purposes and subsequently, reconverted as required. Similarly, there exists an established resale market for coaches which, during the past decade at least, has seen coaches maintain their resale value. Consequently, companies may well choose to exit the market, sell vehicles, maintenance bases and terminals and be no worse off, or may be better off by the amount of income earned in the short term.

Capital requirements would appear to act as a minimal barrier to entry for new or existing coach firms entering new markets. Preliminary BTE investigations of the Australian coach industry indicate that capital requirements for medium to large firms account for between 10 and 20 per cent of companies' expenses; for smaller firms it varies between 5 and 10 per cent of total expenses. The ICC (1984) study found a similar situation in respect of the USA long distance coach industry, with an estimated 80 to 90 per cent of carriers' expenses considered as variable over a short time span. Overall, the industry is not characterised by the need to incur significant risky expenditure to commence operation.

Government regulation

Government regulation contributes to the shape of the industry's structure by largely determining its economic, safety and technical standards. The effects of regulation on the structure of the long distance coach industry as they relate to the intrastate coach industry are, on the whole, to erect a substantial barrier to entry. Even where two or more operators run a particular intrastate service, competition is generally limited. However, over recent years,

interstate operators have increasingly been allowed by some States, notably Western Australia, to provide supplementary services for intrastate passengers.

Recent indications are that the market is also progressively being liberalised, especially in both Queensland and Western Australia, by relaxation of the existing tight economic control exercised by State governments. Where this has already occurred, the increase in competition has resulted in lower fares being available to the public. For example, the recent entry of three new operators on the Brisbane to Cairns route has effectively lowered the cheapest available fare by 29 per cent, from \$85.00 to \$60.00.

Modal competition

Long distance coach transport is, generally, highly substitutable by car, rail and air. Indeed, the ready availability of substitute products places an overall price ceiling on operators. Other considerations affecting substitution are time (which may or may not mean speed alone), and the availability of alternative modes suitable for chosen destinations. The overall reduction in interstate coach fares relative to fares in other competing modes in recent years is a major factor which has influenced substitution of other modes by coach. In addition, it has made travel, or more frequent travel, possible for wider categories of travellers, notably lower socio-economic groups (see Table 2.12).

The price of travel appears to play a very important part in the choice of travel mode. For example, Table 2.8 compares fares for different standards of travel provision and convenience for journeys from Melbourne to Sydney, Adelaide and Brisbane. It will be noted that a real comparison on the basis of fares can only be made in the economy class as coaches do not provide a comparable first class service. Between 1980 and 1984 the relative position of air, rail and coach fares changed considerably, with coach fares actually declining. For example, coach fares on the Sydney to Melbourne route declined by 18 per cent with the established operator (Ansett Pioneer), while with the newest entrant VIP, coach fares declined by 45 per cent from Ansett Pioneer's 1980 fare levels. At the same time, economy rail fares increased by 56 per cent and economy air fares increased by 82 per cent.

By comparison, coach service frequencies (see Table 2.8) are generally well in excess of rail service frequencies, and journey times by coach compare favourably with rail journey times. The major differences lie

in the nature of coach travel, that is, whether the coach service is direct or indirect. Moreover, on routes that involve rail stopover time, coach travel is often faster and more convenient than rail.

PRICING PRACTICES

This section concentrates on examining the behaviour of industry participants in terms of their pricing practices. In general, coach operators are selling a product to customers who are not only well informed on alternative prices for travel, but are also price conscious. This, of course, affects operators in terms of the approach they adopt in setting their fare levels. Indeed, there appears to be a considerable degree of flexibility of fare levels which closely relates to both cost and demand conditions.

In regard to the pricing practices at the intrastate levels, these are not, on the whole, a function of competitive pressures but are determined by State regulating authorities. They specifically take into account such policy considerations as reimbursement and government attitudes towards allowing cross-subsidisation between routes. In practice, this often results in fare levels that are considerably higher than those existing on interstate routes (see Table 5.1).

Fare levels on interstate services (see Chapter 2) may be segmented on the basis of a three-tiered fare structure of high, medium and low prices. The new operators, in particular, have been instrumental in introducing discounted, promotional and innovative fares on interstate route services in an attempt to challenge the market dominance of the established operators. These competitive fare levels appear to attract a highly price-sensitive market. To counter this, higher-priced operators have introduced enhanced service quality packages through improved scheduling and the introduction of more convenient pick up and set down points in suburban locations. Moreover, some have also attempted to differentiate their product by offering express limited-stop services in an endeavour to appeal to the less price-sensitive segment of the market.

Prices set by operators appear largely to reflect the different costs of providing services. At a minimum, it seems that operators will not provide services which are below avoidable costs. The extent to which operators on interstate routes cover fully-allocated costs is difficult to gauge, given current statistical sources. Anecdotal evidence would indicate that the major difference in terms of operator

cost structures is confined to overheads and not so much to the actual total cost of operating vehicles. Total operating costs may also vary to some extent between operators, because of different operating practices such as 'two-up driving' as opposed to 'driver-staging'.

A case study of coach services between Brisbane and Perth via Melbourne (see Chapter 3 and Appendix II) over a seven-day period reveals that operators currently offering fares of between \$159.00 and \$206.00 per trip would all be covering avoidable costs. On the basis of an operator making 14 trips per week and employing between 27-31 drivers, depending on method of employment (see Appendix II), it is

TABLE 5.1-PASSENGER FARE COMPARISON OF INTERSTATE AND INTRASTATE ROUTES: NATIONAL OPERATORS AS AT NOVEMBER 1984

Route	Distance (km)	Established operators (cents per km)			New operators (cents per km)	
		Ansett	Pioneer	Greyhound	VIP	Deluxe
Interstate						
Bris-Syd	1 020		3.63	3.43	2.45	2.94
Bris-Melb	1 905		3.67	3.62	2.62	3.15
Bris-Adel	2 325		4.30	4.27	3.23	3.87
Syd-Melb ^a	1 040		3.56	3.37	2.40	2.88
Syd-Melb ^b	960		3.85	3.65	2.60	3.13
Syd-Adel	1 560		4.49	4.42	3.21	3.85
Adel-Melb	800		4.63	4.38	3.13	3.75
Adel-Perth	2 815		3.52	3.87	2.13	3.02
Intrastate						
Bris-Cairns	1 950		4.36	4.41	3.07 ^c	3.85 ^c
T'ville-Mt Isa	910		7.40	7.40	..	..
Bris-Mt Isa	1 900		..	5.70	..	..
Perth-Pt Hed	1 700		5.00	5.00	..	4.70
Perth-Derby	2 560		..	5.00	..	..
Perth-Tom						
Price	1 620		..	5.40	..	..

a. Via Canberra.

b. Direct.

c. Not introduced until January 1985.

.. not applicable

Sources: Ansett Pioneer, Greyhound, VIP and Deluxe timetables (1984).

estimated that short-run avoidable costs would be in the range of 50-55 cents per vehicle kilometre, comprising:

- . running costs (fuel, lubricants and tyres) of 21 cents;
- . labour costs (annual wage rate, penalty rates, workers compensation, accommodation and payroll tax) of between 16-21 cents (depending on method of employment); and
- . maintenance costs of 13 cents.

Long-run avoidable costs are estimated to be in the range of 63-68 cents per vehicle kilometre, comprising short-run avoidable costs of between 50-55 cents per vehicle kilometre, with 13 cents per vehicle kilometre representing the capital cost of the coach (including registration, third party and comprehensive insurance).

Revenue is calculated on the basis of publicised fares and assumes an average load factor of 70 per cent. Revenue figures, based on the lowest discount fare (\$159.00) and highest fare (\$206.00) available in November 1984 (including an allowance for a 20 per cent travel agent fee), show that the yield per vehicle kilometre ranges from 79 to 97 cents (allowing for concessions as discussed in Chapter 2). This is in excess of long-run avoidable costs of 63-68 cents per kilometre. The extent to which operators cover fully-allocated costs is not known, given that their business usually involves other activities such as charters, tours and regular route operations.

The profitability of an operator is closely tied to load factors. Operators commonly engage in a variety of practices to achieve higher load factors, such as offering concessions and standby fares. The most common form of price discrimination is for operators to segment the market on the basis of different demand conditions, notably with respect to the granting of concessional fares to pensioners and children. The granting of concessional fares to certain types of customer varies between operators. The higher-priced operators offer concessions more readily than do low-priced operators. In general, the low-priced operators do not offer an extensive range of concessions on intercapital routes with fares below \$50.00. This was understood to be an outcome of operators seeking to cover at least short-run avoidable costs. A similar situation exists in regard to standby fares which have been introduced by operators such as Ansett Pioneer, who offer significant reductions (as much as 45 per cent off schedule fares on Sydney-Brisbane) as a means of achieving maximum loadings (see Chapter 2).

The significantly higher fares generally prevailing in the coach industry in the late 1970s, as compared to those currently on offer, now appears to be a contributory factor which stimulated new operators to enter the industry. The strategy of the new entrant seems to have been to maximise revenue by lowering fares to stimulate demand and consequently, to achieve higher load factors. Industry sources indicate that loadings in the late 1970s commonly averaged around 60 per cent. The emphasis on coach rather than passenger revenue was initially only partly illustrated by Deluxe, whose discounted fares did not fall significantly below those offered by established operators. The pricing practice adopted by VIP in 1982, however, seems to exemplify this new approach with the introduction of a simple \$25.00 fare on routes such as Sydney-Melbourne, Adelaide-Melbourne and Brisbane-Sydney (to be viable, such a fare structure requires high loadings in excess of 70 per cent).

It appears that the attributes of the industry are such that operators find fare increases difficult to maintain when competitors are unlikely to match them, despite apparent cost increases. For example, the attempt to raise the base fare in November 1984 on major routes (for instance, Sydney to Brisbane) failed to eventuate as a number of existing operators maintained their existing price structure. The outcome of this situation is that fare increases tend to be relatively infrequent, as evident from the fact that the \$25.00 fare introduced in 1982 still represents the bench mark fare level for much of the industry. This is despite the significant cost increases the industry has incurred over the last few years. Fares, on the whole, appear to be highly flexible downward as operators seem ready to match the fare decreases of other operators in order not to lose significant market share.

INDUSTRY PERFORMANCE

At the outset, it is worth noting that the competitive nature of the market at the interstate level results in operators being particularly consumer-responsive and, on the whole, offering a high quality, low cost product. Specifically, the interstate coach industry performance is highlighted by high quality of service;

- . a continuing process of lessening concentration levels and enhanced competition; and
- . fare levels which have decreased below levels prevailing in 1980 in spite of significant cost increases.

On the intrastate level the outcome is considerably different. In practice, service levels are lower, concentration is higher on most routes and fare levels exceed those on comparable interstate routes. With regard to safety, both the interstate and intrastate segments of the long distance coach industry are characterised by relatively few accidents, given the number of passenger kilometres travelled annually (discussed later).

This section examines some characteristics which are indicative of the industry's performance. In particular, attention is directed towards the industry's levels of service, concentration and stability, safety and fare structure.

Levels of service

The high levels of service which presently characterise the long distance coach industry and which are of particular benefit to low socio-economic groups are due to a combination of external and internal factors. External factors include road improvements and the technological development of vehicles, while internal factors refer to quality of service improvements generated from within the industry itself.

A major achievement, overall, of new entrants operating interstate routes has been their ability to enter the market successfully by offering enhanced price/quality packages as alternatives to those offered by the established operators. For example, they have provided improved service quality through substantial investment in modern equipment. As a consequence, established operators have also moved to upgrade their fleets. This contrasts with the product orientation of new entrants to the British express coach industry following deregulation in 1980, when operators chose a 'down market' approach by offering low fares and low standard coaches. This has proved on the whole unsuccessful (White 1983).

Major investment in road infrastructure over the past decade has resulted in significant improvements to road quality which, in turn, has led to notable reductions in travel times (BTE 1984a). The general growth in the proportion of sealed roads in all States and significant increases in the lengths of divided carriageways, as well as the planned completion of the national highway system by 1988, is expected to lead to further improvement in the overall quality of long distance coach travel. An example of this improvement in road quality can be seen on the Sydney to Melbourne route where the length of

divided carriageway has more than tripled from 93 kilometres in 1974 to 321 kilometres in 1984.

Substantial investment is currently also occurring in the coach industry because of vehicle improvement. The latest in overseas coach technology is being imported from North America and Europe either in the form of complete vehicles or components for local assembly. The finished coaches incorporate the latest features in express travel for the benefit of both passenger and operator alike. Coaches include videos, radio and tape-deck music, washroom facilities, reclining seats and air conditioning for passenger comfort.

At the intrastate level, an analysis of the long distance coach industry in Queensland by Johnston and Catchpole (1980), revealed that long distance coach services are more effective in providing transport to small population centres than the rail network. The study found that the long distance coach system offers passenger services to a significantly larger proportion of the State's population and area than the railway network. In addition, intrastate coach services were found to be invariably faster than those provided by rail, with service frequencies also well in excess of rail.

Concentration and stability

Following a period of high concentration during the 1970s, the level of concentration in the interstate long distance coach industry has been gradually declining since 1980. However, even at this stage, the market remains dominated by relatively few operators. In addition, the smaller operators tend to enter only the medium to highly trafficked routes. On the intrastate level data are more difficult to obtain, but evidence exists to suggest that route concentration, particularly in Queensland, is progressively being diluted. This section primarily examines concentration of the interstate industry by viewing it in terms of the number of operators in general and their respective market shares, and the number of operators represented on different routes.

Market shares

Interstate coach passenger services are provided by over 200 coaches, 90 per cent of which belong to seven companies. Four companies have over 40 coaches each, two have 11 coaches and the rest of the coaches are owned by smaller operators. It is worth noting that of the four major operators, two also have a large number of other coaches involved in touring and charter work. The market shares held by

operators in the industry are detailed in Chapter 2. In line with the distribution of coaches among operators, it is apparent that the four major operators control in excess of 80 per cent of the market, with 50 per cent held by only two of them. While this may represent a high degree of concentration, it should be noted that the industry is nowhere near as highly concentrated as it was in 1980 when only two operators had in excess of 90 per cent of the market.

The competitive nature of interstate coach operators in particular has tended to see operators pay increased attention to marketing in an effort to retain or build individual or overall market share. Efforts have been directed at two specific groups, namely travel agents and customers. In regard to travel agents, new operators have been the most successful in breaking down barriers to their general acceptance by offering a higher travel agents' commission. It is understood from industry sources that travel agents account for in excess of two-thirds of all bookings for long distance coach travel. The doubling of travel agent commissions from 10 to 20 per cent by VIP, and then by other new entrants, is seen as contributing significantly to their overall market gains.

The ease with which new entrants gained a significant market share in a comparatively short period of time may be attributed, in part, to existing operators pursuing policies which they considered would maximise present earnings. The new operators' low price strategy was likely to meet minimal resistance so long as the industry was expanding rapidly and, as a consequence, was not in turn depressing the overall financial performance of existing operators. Growth rates have now started to decline and this has no doubt contributed to intensifying competitive practices amongst the operators. Accordingly, the response of the more established operators was initially limited and channelled into product innovation and marketing, rather than price competition. For example, Table 2.7 and Appendix I show that Ansett Pioneer and Greyhound did not start seriously competing on price until March 1984. By that time, the two new major operators, Deluxe and VIP, had already captured a significant share of the market and were in a strongly competitive position to withstand any initiative that the established operators were likely to take with respect to price competition.

Route concentration

There are not only significant differences in interstate route coverage but also in the level of services provided by coach operators on regular intercapital route services (see Table 2.1). In terms of percentage share of regular scheduled route services, Ansett

Pioneer accounts for 25 per cent of regular intercapital route services, VIP 22 per cent, Greyhound 21 per cent and Deluxe 19 per cent. In contrast, AAC and OEW only account for 2 and 4 per cent of regular route services, respectively. It is worth noting that while Greyhound and Ansett Pioneer operate an extensive route service network, both VIP and Deluxe run more intensive operations, providing a comparable total number of services on fewer routes.

Even among the national operators different strategies appear to be pursued. For example, Table 2.1 shows that in November 1984 two of the major operators had services on virtually all intercapital routes. The two other national operators concentrated on the dense Brisbane-Sydney-Melbourne-Perth routes. This pattern suggests that quite different strategies may be followed by the established national operators and more recent entrants. The former may, in fact, be pursuing an objective of national route services, while the latter aim to maximise revenue. It is also possible that the service distribution of the established national operators is related to their existing and traditional intrastate route service provisions, whereas the new entrants do not have the same constraints.

Taken separately, the intrastate industry had been characterised, until the early 1980s, by uniformly high route concentration levels enforced by State government regulation. In practice, this had meant usually only one operator servicing a particular route. Recently, however, selected routes in Queensland have been opened to new intrastate entrants, decreasing the concentration of operators and hence facilitating competition.

Stability

The interstate coach industry in Australia is operating in a somewhat unstable and highly competitive environment. Given the licensing controls of coach services at the State level, the intrastate industry is generally very stable. During the 1970s the interstate industry was dominated by only two operators. Since the early 1980s, the actual number of operators in the long distance interstate coach industry has increased significantly. Table 5.2 illustrates the extent of fluidity of the coach industry over the 1980-1984 period, with operators staying in the market but tending to change their status and an influx of entrants mainly on the single route level. For example, McCafferty's has surrendered its multi-route status, while Deluxe has become a national operator. Aussie Express, Northwest Express and Intertours are all new single route operators. However, it is worth noting that VIP entered the market and moved almost immediately to become a national operator.

TABLE 5.2-COMPOSITION OF THE INTERSTATE LONG DISTANCE COACH INDUSTRY:
TYPE OF OPERATOR

<i>Operation</i>	<i>1980</i>	<i>1984</i>
National Operators	Ansett Pioneer Greyhound	Ansett Pioneer Greyhound Deluxe VIP
Multi route Operators	Deluxe AAC McCafferty's OEW	AAC OEW ^c
Single route Operators	Continental Trailways ^a Sandgroper Express ^b	McCafferty's ^d Aussie Express Intertours Northwest Express

a. Continental Trailways taken over by Deluxe in 1984.

b. Sandgroper Express taken over by Deluxe in late 1983.

c. OEW taken over by VIP in early 1985 but is still operating under the trade name OEW.

d. Discontinued the Brisbane to Melbourne route in November 1984.

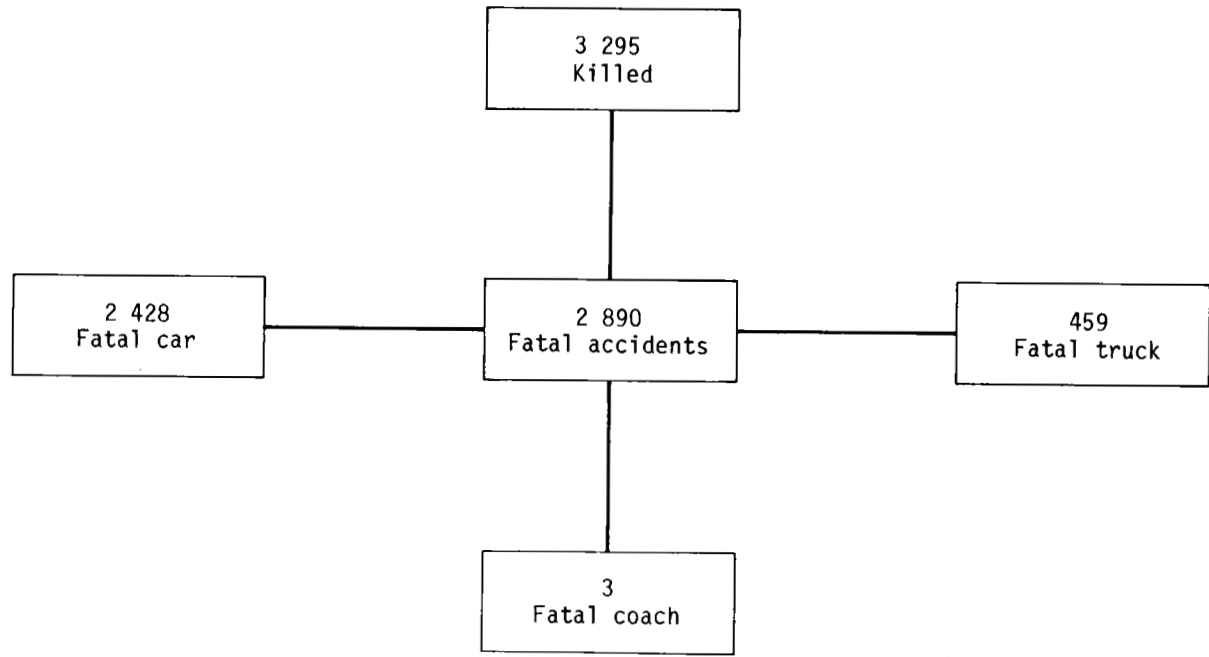
Source: Personal communication with industry representatives (1985).

Safety

Heavy vehicle accident statistics indicate that coach safety does not appear to be a function of the existence or absence of economic regulation.

The only complete set of comparative statistics available since the collection of accident data was standardised is that for 1981. Given that the discussion which follows is based on this limited evidence, conclusions that are drawn must be considered preliminary until more recent data are analysed on a time-series basis. However, the statistics can provide some indication of the coach industry's standing in terms of safety relative to trucks and cars (see Figure 5.1). Out of a total of 2890 fatal accidents in 1981, 84 per cent and 15.9 per cent involved cars and trucks, respectively; only a fraction (0.1 per cent) involved coaches.

Examining the rate of fatal accidents per 100 million passenger-kilometres by type of vehicle, further evidence is adduced to indicate



Source: DoT (1983).

Figure 5.1-Australian fatal accidents, 1981

that coaches had by far the best safety record in 1981 (see Table 5.3). Indeed, the coach total accident rate per 100 million passenger kilometres is estimated to be one-seventh that of cars. Consequently, any shift from car to coach travel may in theory be expected to enhance the overall road safety position.

A summary of the details of the three fatal coach accidents for 1981 shows that they all apparently involved long distance coaches, given the time of day and particular location (see Table 5.4). The accidents at Bli Bli and Ceduna involved collisions with cars resulting in minimal casualties among coach passengers, while the Gundagai accident was a head-on crash with a semi-trailer. Not unexpectedly, these casualty figures indicate that cars are more vulnerable in crashes with any heavy vehicle, whereas a coach and its passengers are most likely to sustain serious injury only in collision with other heavy vehicles. It is also worth noting that two of the accidents occurred on undivided roads, a likelihood which will diminish as major sections of the road system are progressively upgraded to a divided carriageway standard, notably on some of the more heavily trafficked routes such as Sydney-Melbourne.

Concern has recently been expressed that operators who face rising costs but who are receiving decreasing income in a highly competitive market place are contributing to the accident rates of their vehicles by cutting corners on maintenance, work practices and driver standards (Monaghan 1984). This claim does not seem to be supported by available coach accident statistics. Examination of the road freight industry has also shown that this hypothesis cannot be sustained (Agnew and Valentine 1984).

TABLE 5.3-FATAL ACCIDENT INVOLVEMENT BY TYPE OF VEHICLE, 1981

<i>Vehicle type</i>	<i>Annual passenger kilometres travelled (million)</i>	<i>Number of fatal accidents</i>	<i>Rate per 100m passenger kilometres</i>
Car	180 000	2 428	1.35
Truck	11 000	462	4.20
Coach ^a	1 551 ^b	3	0.19

a. Interstate only.

b. Based on 15 per cent annual increase in passenger kilometres travelled since 1980, and 75 per cent load factor.

Sources: DoT (1981). NRFII (1984).

TABLE 5.4-COACH ACCIDENT DATA, 1981

Crash number	Location	Date	Time	Road	Crash type	Casualties			
						Coach		Other vehicle(s)	
						Fatal	Injured	Fatal	Injured
1	Bli Bli (Qld)	20/06	2-3am	NH1	Head-on	-	2	2	1
2	Ceduna (SA)	11/10	Midnight	NH1	Side-swipe Travel in same direction	-	-	1	3
3	Gundagai (NSW)	15/12	3-4am	NH31	Head-on	3	34	-	1

- nil

NH National Highway

Source: DoT (1981).

Fare levels

In contrast to other prices and general cost increases, listed interstate coach fares have been declining overall in real terms during the past four years, after a period of steady increases during the preceding decade. This decline, however, has not been uniform; established operators have shown a tendency to experiment with different fare levels. In contrast, the newest national operator has not changed its low fare since entering the industry in 1982.

Indeed, in the 1970s coach fares rose by an average of over 200 per cent (see Figure 2.3), in spite of the occasional short-lived presence of low-fare operators on some routes. At the same time, the CPI rose by only 163 per cent. This situation conflicts with the post-1980 position, which has seen fare levels decrease by up to 50 per cent despite sustained increases in costs such as fuel and wages. These costs have risen since 1980 by in excess of 100 per cent and 30 per cent, respectively. These contradictory trends have led to claims that, in the interest of price competition, operators have made sacrifices at the expense of passenger safety, comfort and convenience, but no evidence has been produced to support these claims.

The downward pressure on fares evident in the long distance coach industry has not been reflected by similar price movements in the other modes. For example, on the Brisbane to Sydney route, available coach fares are currently half of what they used to be in 1980. In contrast, the economy air fare rose by almost half in the same period, while economy rail fares experienced an increase of 33 per cent. It must be noted, however, that these price movements do not take into account special fares based on available stand-by, advance purchase or other arrangements.

Whilst interstate coach fares have undergone significant reduction established operators have not tended to follow the competition all the way and are offering fares up to 80 per cent above the cheapest available on the same route. They are apparently attempting to trade on their established reputation of quality of service, both *en route* and at origin and destination.

Intrastate trips by coach are also usually more expensive than the most expensive interstate trips of comparable length, as shown in Table 5.1. Given that the cost equation is similar for both types of operation, it appears that State government regulation and/or significantly lower load factors prevent the economies evidently

achievable on interstate routes from being passed on in the form of lower fares to the intrastate consumer. Overall, a comparison of per kilometre fares presented in Table 5.1 shows that interstate operations are more efficiently priced than intrastate ones. In addition, there appears to be no direct relationship between route length and the fares offered. Fare levels would seem to depend heavily on the presence or absence of competition.

CHAPTER 6-CONCLUDING REMARKS

The long distance coach industry carries in the order of 4 million passengers per annum, split evenly between interstate and intrastate services. The interstate market alone supports an industry that has around 2000 employees and an annual turnover of \$80 to \$90 million. The market served by this industry are members of lower income households who tend to be either under 25 or over 60 years old and who travel primarily for non-business purposes. This market tends to be similar to rail but is distinctly different to that served by air or car. The rapid growth that has occurred over the last few years in the interstate coach market (in the order of 60 per cent since 1980) has focussed public attention on the provision of an efficient and safe transport service. Various State governments are currently undertaking internal assessments while the House of Representatives Standing Committee on Transport Safety is conducting an inquiry into bus and coach safety.

This Paper has concentrated, in large part, on the interstate sector where change has been most pronounced. The interstate sector is characterised by expanding investment levels, rising demand, growing innovation and product development and few signs of safety problems. In addition, there is a substantial degree of competition which has contributed to the significant decrease in fare levels in recent years. For example, Ansett Pioneer's 'full' Sydney-Melbourne fare in 1984 was 15 per cent less in real terms than it was in 1966, while the lowest fare available on this route was 40 per cent lower in real terms than in 1966. The position in regard to the intrastate coach market is not the same. Some State governments have recognised that problems exist, and are now seeking their resolution. This situation can be partly attributed to the economic control of intrastate coach services exercised by State governments and the relative size of available markets.

GOVERNMENT INVOLVEMENT

The policies of government (both State and Federal) clearly influence the conditions under which transport services operate. In particular,

governments may influence the structure of transport services through their involvement in the provision of services such as railways and road networks, and their regulation of the transport system.

The State governments are using various approaches to the regulation of the intrastate sector. Most use quantity regulation to restrict entry into routes and, in particular, those routes that compete with rail. Use of such regulation can allow cross-subsidisation of low traffic routes by the more heavily trafficked routes. In Victoria, V/Line is pursuing an alternative policy of placing non-urban coach operators under contract to provide particular services.

This study was unable to identify any conditions present in the interstate coach industry which constitute a failure of the market and which would justify government intervention. The analysis indicated that:

- . no effective scale economies appear to exist;
- . operators adjust well to fluctuations in demand (using subcontract, charter and tour operator vehicles to cater for peak-loading periods such as Christmas and school holidays); and
- . sunk costs are a relatively small proportion of total costs (making predatory pricing a costly and ineffective strategy).

Regulations at the intrastate level give rise to higher fares in some markets where competition is lacking. In addition, as interstate coaches have restricted pick up and set down rights, some regional markets that could be provided with coach services based on the excess capacity of interstate routes are either not served or provided with a low frequency service. The Australian regional market is not as developed as in the USA, where an average passenger trip length of 320 kilometres (ICC 1984) on interstate coaches compares with approximately 1000 kilometres in Australia.

This study did not find evidence of deteriorating safety standards in this industry (see DoT 1985). Improved industry safety appears to be capable of being achieved through enhanced enforcement of existing regulation, particularly with regard to driver behaviour aspects such as hours of driving and speeding. In view of the constitutional division of power that sees individual States responsible for safety regulation, there appears to be an on-going need for standardisation of these regulations if enforcement policies are to be effective.

COMPETITION

Relying on publicly provided infrastructure, the interstate coach industry has shown a significant rate of growth over the last five years. The growth of the industry has been assisted by external factors like road improvements, general economic conditions and demographic changes. Its major impetus, however, can be attributed to industry competition with respect to fare levels and service standards. In the face of rising input prices:

- . fares have actually been reduced in real terms;
- . services have been expanded with regard to both frequency and route network; and
- . the technical and passenger comfort levels as well as the efficiency of coaches has been significantly improved by the utilisation of the recent technological advances.

The industry has also witnessed the emergence of a number of new entrants on interstate routes, particularly on the most heavily trafficked eastern seaboard. After a period of industry concentration at the interstate level, when two operators dominated the market with only occasional and short-lived attempts by smaller operators to establish themselves, the industry now appears to maintain successfully a larger mix of national, medium and small operators. The differences in fare levels between operators appear to reflect, in part, differences in costs. The case study described in Appendix II indicates that the costs of operating a coach are similar for different operators, except in the areas of wage costs and overheads. Wage costs vary because of the different arrangements under which drivers are employed ('two-up' as opposed to 'driver-staging' arrangements). Overhead costs appear to account for the most significant difference between operators, mainly because of the size and complexity of their various administrative structures. Nevertheless, the case study indicated that operators appear to be covering short-run avoidable costs and are making a contribution to covering, if not exceeding, overhead costs.

GROWTH, INVESTMENT, COSTS AND PRODUCTIVITY

Interstate coach travel may be expected to continue to expand but at a somewhat reduced rate as compared to recent years. Continued growth within the industry will depend upon the motivation of operators to

search for increasingly efficient levels of operation and their ability to develop new travel markets.

The availability of finance, such as the existence of leasing arrangements, has no doubt assisted operators to acquire up-to-date equipment and vehicles. The termination of the investment allowance at 30 June 1985 may have an impact on the rate of industry re-equipment; however, this may not happen for some time as there is a two-year transitional period. The industry does not appear to have any major supply problems as it has the apparent capacity and resources to gear up to meet any foreseeable increases in demand, either by acquiring additional vehicles or by hiring subcontractors with tour and charter vehicles.

In view of rising input prices, it appears doubtful that the current fare level structure within the industry can be maintained. Fare levels will inevitably increase if profitability is to be maintained, given cost increases. Indeed, costs have already been substantially increasing over recent years and they are expected to continue to rise with the introduction of shorter working hours and higher fuel prices. Productivity gains, however, are also likely to be achieved by the introduction by the Austral Group of the 67 passenger-capacity, double-decker Setra coaches (Johnson 1985); an expansion of the industry into the lucrative tourism market, especially overseas visitors (BTE 1985b); and the progressive freeing-up of intrastate routes to interstate operators, resulting in greater seat utilisation.

APPENDIX I-SUPPLEMENTARY STATISTICAL TABLES

The following tables provide detailed statistical information relating to air, rail and coach passenger fares for selected intercapital routes over the 1960-84 period.

TABLE I.1-AIR PASSENGER FARES: CAPITAL CITIES, ECONOMY SINGLE FARE AS AT 1 NOVEMBER 1960 to 1984
(Dollars)

Year	Route								
	Brisbane -Sydney	Brisbane- Melbourne	Brisbane -Adelaide	Sydney- Melbourne	Sydney- Adelaide	Adelaide- Melbourne	Sydney- Canberra	Melbourne -Canberra	Adelaide -Perth
1960	19.20	37.40	54.30	18.20	35.10	17.00	8.90 ^a	14.10 ^a	53.30
1961	19.20	37.40	54.30	18.20	35.10	17.00	8.90 ^a	14.10 ^a	53.30
1962	19.20	37.40	54.30	18.20	35.10	17.00	8.90 ^a	14.10 ^a	54.30
1963	19.20	37.40	54.30	18.20	35.10	17.00	8.90 ^a	14.10 ^a	54.30
1964	21.40	41.80	60.90	20.40	39.50	19.10	9.40 ^a	21.20 ^a	57.60
1965	21.40	41.80	60.90	20.40	39.50	19.10	9.40 ^a	21.20 ^a	57.60
1966	23.40	45.70	66.50	22.30	43.10	20.80	10.30 ^a	23.20 ^a	63.00
1967	24.60	48.10	70.00	23.50	45.40	21.90	9.20	20.70	66.20
1968	24.60	48.10	70.00	23.50	45.40	21.90	9.20	20.70	66.20
1969	24.60	48.10	70.00	23.50	45.40	21.90	9.20	20.70	66.20
1970	26.90	52.50	76.40	25.60	49.50	23.90	10.10	22.60	72.30
1971	28.60	55.90	81.40	27.30	52.80	25.50	10.80	24.10	77.00
1972	28.60	55.90	81.40	27.30	52.80	25.50	10.80	24.10	77.00
1973	28.60	55.90	81.40	27.30	52.80	25.50	10.80	24.10	77.00

TABLE I.1 (Cont)-AIR PASSENGER FARES: CAPITAL CITIES, ECONOMY SINGLE FARE AS AT 1 NOVEMBER 1960 to 1984

(Dollars)

Year	Route								
	Brisbane -Sydney	Brisbane- Melbourne	Brisbane -Adelaide	Sydney- Melbourne	Sydney- Adelaide	Adelaide- Melbourne	Sydney- Canberra	Melbourne -Canberra	Adelaide -Perth
1974	31.90	62.30	83.30	30.40	51.40	28.50	12.30	26.90	85.10
1975	47.90	85.00	109.20	45.80	69.90	42.40	21.10	33.30	119.90
1976	50.80	90.20	115.80	48.50	74.20	45.00	22.40	35.40	127.20
1977	55.00	96.70	123.80	52.60	79.70	48.80	24.90	38.50	136.00
1978	58.50	101.60	129.60	56.10	84.00	52.20	27.40	41.60	142.20
1979	68.00	116.30	147.70	65.30	96.60	60.90	33.20	49.10	161.80
1980	80.70	130.30	172.70	77.60	113.60	72.50	40.50	58.90	189.00
1981	98.40	145.00	184.70	95.50	129.40	90.80	60.70	78.00	200.00
1982	110.20	162.30	206.80	106.90	144.90	101.60	68.00	87.30	223.90
1983	130.00	191.50	236.10	125.70	172.20	118.80	71.50	99.30	251.70
1984	145.70	214.00	263.30	140.90	192.50	133.10	80.10	111.30	280.60

a. Only first class fares available for these years.

Sources: ABS (1977-78). Tasmanian Tourist Bureau (1984).

TABLE I.2-RAIL PASSENGER FARES: CAPITAL CITIES, ECONOMY SINGLE FARE AS AT 1 NOVEMBER 1960 to 1984
(Dollars)

Year	Route						
	Brisbane -Sydney	Brisbane- Melbourne	Brisbane -Adelaide	Sydney- Melbourne	Sydney- Adelaide	Adelaide- Melbourne	Adelaide -Perth
1960	9.75	14.85	19.25	8.85	12.55	7.35	31.20
1961	9.75	14.85	19.25	8.85	12.55	7.35	33.55
1962	10.20	16.95	na	10.00	na	8.40	32.00
1963	10.20	16.95	na	10.00	na	8.40	32.00
1964	10.20	16.95	na	10.00	na	8.40	33.10
1965	10.20	16.95	na	10.00	na	8.40	34.55
1966	10.20	16.95	na	10.00	na	8.40	34.55
1967	11.25	18.60	na	11.05	na	9.20	40.30
1968	11.25	18.60	na	11.05	na	9.20	40.60
1969	11.25	18.60	na	11.05	na	9.20	41.45
1970	12.40	20.40	36.45	12.20	27.25	10.10	45.15
1971	17.10	25.40	45.00	15.20	32.60	11.60	55.00
1972	17.10	25.40	45.00	15.20	32.60	11.60	55.00
1973	17.10	25.40	45.00	15.20	32.60	11.60	55.00

TABLE I.2 (Cont)-RAIL PASSENGER FARES: CAPITAL CITIES, ECONOMY SINGLE FARE AS AT 1 NOVEMBER 1960 to 1984
(Dollars)

Year	Route						
	Brisbane -Sydney	Brisbane- Melbourne	Brisbane -Adelaide	Sydney- Melbourne	Sydney- Adelaide	Adelaide- Melbourne	Adelaide -Perth
1974	17.50	28.00	na	16.50	na	13.00	63.00
1975	20.00	40.00	na	20.00	na	16.00	79.50
1976	25.00	50.00	na	25.00	na	20.00	100.00
1977	25.00	50.00	na	25.00	na	21.00	111.50
1978	25.00	50.00	na	25.00	na	21.00	126.00
1979	30.00	60.00	na	30.00	na	23.00	140.00
1980	36.00	72.00	na	36.00	na	28.00	166.50
1981	42.00	84.00	na	42.00	na	33.00	182.50
1982	53.00	106.00	na	53.00	na	42.00	216.00
1983	53.00	106.00	na	53.00	na	42.00	216.00
1984	56.00	112.00	154.00	56.00	98.00	42.00	241.00

na not available

Sources: ABS (1977-78). Tasmanian Tourist Bureau (1984).

TABLE I.3-COACH PASSENGER FARES: CAPITAL CITIES, ADULT SINGLE FARE AS AT 1 NOVEMBER 1960 to 1984

(Dollars)

<i>Year and Operator</i>	<i>Route</i>						
	<i>Brisbane -Sydney</i>	<i>Brisbane- Melbourne</i>	<i>Brisbane -Adelaide</i>	<i>Sydney- Melbourne</i>	<i>Sydney- Adelaide</i>	<i>Adelaide- Melbourne</i>	<i>Adelaide -Perth</i>
1960							
Ansett Pioneer (Express)	9.10	na	na	9.90	na	7.90	na
1961							
Ansett Pioneer (Express)	11.00	na	na	10.00	na	7.25	na
1962							
Ansett Pioneer (Express)	11.00	21.00	29.25	10.00	17.25	7.25	na
1963							
Ansett Pioneer (Express)	11.00	21.00	29.25	10.00	18.25	8.25	na
Redline (Express)	8.50	17.00	na	9.50	na	na	na
1964							
Ansett Pioneer (Express)	11.50	22.00	30.75	10.50	19.25	8.75	na
Redline (Express)	9.50	17.00	na	9.50	na	na	na
1965							
Ansett Pioneer (Express)	11.50	22.00	30.75	10.50	19.25	8.75	na
Redline (Express)	10.50	18.00	26.50	9.50	18.50	8.50	na
Gold Coast (Express)	na	20.00	na	9.50	na	na	na
1966							
Ansett Pioneer (Express)	11.50	22.00	30.75	10.50	19.25	8.75	na
Redline (Express)	9.50	18.00	26.50	9.50	18.00	8.50	na

TABLE I.3 (Cont)-COACH PASSENGER FARES: CAPITAL CITIES, ADULT SINGLE FARE AS AT 1 NOVEMBER 1960 to 1984
(Dollars)

Year and Operator	Route						
	Brisbane -Sydney	Brisbane- Melbourne	Brisbane -Adelaide	Sydney- Melbourne	Sydney- Adelaide	Adelaide- Melbourne	Adelaide -Perth
1967							
Ansett Pioneer (Express)	11.80	22.60	31.65	10.80	19.85	9.05	na
Redline (Express)	9.50	18.00	25.00	9.50	16.50	7.00	na
1968							
Ansett Pioneer (Express)	12.80	24.60	34.60	11.80	21.80	10.00	na
Redline (Express)	10.00	19.50	27.50	9.50	17.50	8.00	na
1969							
Ansett Pioneer (Express)	12.80	24.60	34.60	11.80	21.80	10.00	na
Redline (Express)	10.00	19.50	27.50	9.50	17.50	8.00	na
Greyhound (Express)	10.50	20.00	28.00	9.50	17.50	8.00	na
1970							
Ansett Pioneer (Express)	14.40	27.80	39.20	13.40	24.80	11.40	na
Panther (Express)	11.00	21.50	30.30	10.50	19.30	8.80	na
Greyhound (Express)	12.00	23.00	32.50	11.00	20.50	9.50	na
1971							
Ansett Pioneer (Express)	16.90	32.80	45.70	15.90	28.80	12.90	na
Panther (Express)	12.90	25.10	35.50	12.20	22.60	10.40	na
Greyhound (Express)	13.80	26.40	37.40	12.60	23.60	11.00	na

TABLE I.3 (Cont)-COACH PASSENGER FARES: CAPITAL CITIES, ADULT SINGLE FARE AS AT 1 NOVEMBER 1960 to 1984
(Dollars)

Year and Operator	Route						
	Brisbane -Sydney	Brisbane- Melbourne	Brisbane -Adelaide	Sydney- Melbourne	Sydney- Adelaide	Adelaide- Melbourne	Adelaide -Perth
1972							
Ansett Pioneer (Express)	16.90	32.80	45.70	15.90	28.80	12.90	na
Panther (Express)	15.20	29.20	41.40	14.00	26.20	12.20	na
Greyhound (Express)	16.90	29.20	41.40	14.00	26.20	12.20	na
Cobb & Co	13.50	27.00	na	na	na	na	na
1973							
Ansett Pioneer (Express)	16.70	32.10	45.50	15.40	28.80	13.40	na
Greyhound (Express)	16.70	32.10	45.50	15.40	28.80	13.40	na
Cobb & Co	14.00	27.50	na	na	na	na	na
1974							
Ansett Pioneer (Express)	20.00	38.00	54.40	18.50	34.50	16.00	na
Greyhound (Express)	18.80	36.20	51.20	17.40	32.40	15.00	na
Cobb & Co	17.80	34.80	na	17.00	na	na	na
1975							
Ansett Pioneer (Express)	24.50	47.00	66.50	22.50	42.00	19.50	na
Greyhound (Express)	23.90	46.00	64.90	21.90	40.80	18.90	na
Cobb & Co	na	40.50	na	na	na	na	na
1976							
Ansett Pioneer (Express)	27.50	53.00	75.00	25.50	47.50	22.00	na
Greyhound (Express)	27.00	51.90	66.90	24.70	40.50	21.30	na
Cobb & Co	26.00	51.00	na	na	na	na	na

TABLE I.3 (Cont)-COACH PASSENGER FARES: CAPITAL CITIES, ADULT SINGLE FARE AS AT 1 NOVEMBER 1960 to 1984
(Dollars)

Year and Operator	Route						
	Brisbane -Sydney	Brisbane- Melbourne	Brisbane -Adelaide	Sydney- Melbourne	Sydney- Adelaide	Adelaide- Melbourne	Adelaide -Perth
1977							
Ansett Pioneer (Express)	31.00	60.00	84.50	29.00	53.50	24.50	na
Greyhound (Express)	30.40	58.50	74.40	28.00	44.00	24.50	na
Cobb & Co	28.50	55.90	na	na	na	na	na
1978							
Ansett Pioneer (Express)	34.10	66.00	93.00	32.00	59.00	27.00	na
Greyhound (Express)	33.50	64.50	82.00	31.00	48.50	26.50	na
Cobb & Co	26.50	63.10	na	na	na	na	na
1979							
Ansett Pioneer (Express)	37.30	71.80	101.30	34.50	54.00	29.50	na
Greyhound (Express)	37.30	71.80	91.30	34.60	54.00	29.50	na
Cobb & Co	34.60	70.90	na	na	na	na	na
1980							
Ansett Pioneer (Express)	48.50	93.60	100.20	45.10	70.30	38.80	80.00
Greyhound (Express)	48.60	93.60	100.10	45.10	70.30	38.80	80.00
Deluxe	na	na	na	27.00	49.00	25.00	75.00
1981							
Ansett Pioneer (Express)	50.90	98.30	105.20	45.10	73.80	40.70	80.00
Greyhound (Express)	40.40	75.50	85.00	35.00	60.90	31.60	85.00
Deluxe	39.00	69.00	89.00	34.00	55.00	33.00	89.00
OEW	na	na	na	23.00	45.00	23.00	75.00

TABLE I.3 (Cont)-COACH PASSENGER FARES: CAPITAL CITIES, ADULT SINGLE FARE AS AT 1 NOVEMBER 1960 to 1984
(Dollars)

Year and Operator	Route						
	Brisbane -Sydney	Brisbane- Melbourne	Brisbane- -Adelaide	Sydney- Melbourne	Sydney- Adelaide	Adelaide- Melbourne	Adelaide -Perth
1982							
Ansett Pioneer (Express)	48.00	84.00	95.00	41.90	74.90	37.60	102.00
Greyhound (Express)	na	na	na	na	na	na	na
Deluxe	29.00	na	na	29.00	na	29.00	95.00
VIP	25.00	na	na	25.00	na	na	na
OEW	35.00	na	na	25.00	50.00	30.00	70.00
1983							
Ansett Pioneer (Express)	48.00	89.90	na	41.90	74.90	37.60	110.00
Greyhound (Express)	30.00	89.40	na	30.00	74.30	37.40	102.00
Deluxe	29.00	58.00	89.00	29.00	58.00	29.00	95.00
VIP	25.00	50.00	75.00	25.00	50.00	25.00	na
OEW	25.00	na	na	25.00	50.00	25.00	75.00
1984							
Ansett Pioneer (Express)	37.00	70.00	100.00	37.00	70.00	37.00	99.00
Greyhound (Express)	35.00	69.00	99.00	35.00	69.00	35.00	109.00
Deluxe	30.00	60.00	90.00	30.00	60.00	30.00	85.00
VIP	25.00	50.00	75.00	25.00	50.00	25.00	60.00
OEW	na	50.00	na	25.00	50.00	25.00	80.00
AAC	24.00	na	na	24.00	48.00	24.00	80.00

na not available

Sources: ABS (1977-78). Ansett Pioneer, Greyhound, Deluxe, VIP, OEW, AAC timetables (various years).
Tasmanian Tourist Bureau (1984).

APPENDIX II-CASE STUDY - COSTING OF AN EXPRESS COACH OPERATION

In order to provide an illustrative example of cost structures in the express coach industry a case study operation has been investigated and costed. It is important to note that costs only directly relate to the case study operation, although they are considered to be indicative of costs throughout the industry.

This case study involves an operation consisting of one return service per day between Brisbane and Perth via Melbourne. The operation of this service could be seen as a discrete operation or as part of a more extensive network.

The details of operation on this route are thus:

- . length of journey - 5690 kilometres
- . duration - 3 days (63 driving hours)
- . departure times - Brisbane 8.00 am
- Perth 8.00 am
- . total number of services per week - 14
- . total kilometres per week - 79 660 kilometres
- . total driving hours per week - 882 hours.

Nine express coaches are assumed for this operation - eight *en-route* and one as a backup. Running maintenance is carried out during layover periods, whilst the backup coach is used on a rotation basis to enable the other coaches to be withdrawn from service for more extensive maintenance. This additional coach is also used if a significant mechanical defect occurs in one of the scheduled coaches. The backup coach could also be used for charter operations and would be used to expand the service offered during the peak season (December and January).

Of the nine coaches, three are assumed to have been purchased in each of 1981, 1983 and 1984 at a cost of \$175 000, \$210 000 and \$250 000 per coach respectively; under five-year lease agreements with a 25 per

TABLE II.2-COSTS PER WEEK^a, EXPRESS COACH SERVICE BETWEEN BRISBANE AND PERTH VIA MELBOURNE (AS DETAILED IN SCHEDULES 1-4)
(Dollars)

	<i>Method of employment</i>		
	<i>Staged-driver</i>	<i>Deluxe^b</i>	<i>New two-up award</i>
Capital and on-road costs	10 300 (13)	10 300 (13)	10 300 (13)
Operating costs	27 100 (34)	27 100 (34)	27 100 (34)
Driver wages	13 000 (16)	13 800 (17)	16 900 (21)
Total	50 400 (63)	51 200 (64)	54 300 (68)

a. Not including overheads.

b. Two-up driving with costs based on a flat daily rate paid by Deluxe.

Note: Figures in parentheses are cents per kilometre.

per kilometre). These estimates produce margins from 24 to 50 cents per kilometre between costs (less overheads) and revenue.

Under driver staging the annual margins are around \$1.2m and \$2.1m for the two fare structures. Under the Deluxe system these annual margins are \$1.2m and \$2.0m. Under the new two-up award they are \$1.0m and \$1.9m. This means that overheads must come within the relevant margin to ensure that the operator at least breaks even. If overheads are greater than this then the operator must either lower costs elsewhere or maintain a higher occupancy rate, assuming that the same fare is maintained. Where a significant number of bookings are made through travel agencies the revenue obtained will fall, thus reducing the margin for overheads. For example, if a 20 per cent commission is payable on 70 per cent of fares in the case study operation, revenue is reduced cutting the overhead margin by 30 to 50 per cent.

Revenue can be significantly boosted by the peak season. If a 90 per cent occupancy rate is assumed for six weeks, this increases the

annual margins by \$90 000 and \$110 000 for the two fare structures. This could be made much larger by the use of additional services which would be provided by using sub-contractors. Because the market at present exhibits a high degree of competition it could be expected that fare levels would be highly dependent on cost structures. Costs, in turn, would appear to be similar for all operators except for overheads.

Thus, as illustrated in the above case study operation, much of the difference in fares between the operators could possibly be explained by differences in overhead costs, which in turn enable the discount operators to charge lower fares because of their lower overhead structure. It may be significant in this case in that it is the newer entrants specialising in express services over the high density routes who are able to offer cheaper fares, whereas it is the older, more established operators that are charging premium fares.

SCHEDULE 1-CAPITAL COSTS

TABLE II.3-CAPITAL REPAYMENTS

<i>Year of purchase</i>	<i>Cost (dollars)</i>	<i>Interest rate (per cent)</i>	<i>Monthly repayment (dollars)</i>
1981	175 000	20	4 137.53
1983	210 000	17	4 592.96
1984	250 000	15	5 177.15

Total repayments = \$9 600 per week
 = \$500 600 per annum

Government registration and insurance = \$598 per coach per annum
 = \$5 382 per annum in total

Extra insurance = \$3 380 per coach per annum
 = \$30 420 per annum in total

Total capital costs : per year = \$536 500
 : per week = \$10 300

SCHEDULE 2-DRIVER WAGE COSTS

Weekly award rate (40 hour week)	\$272.10
Base rate (272.10/40)	\$6.8025/hr
Shift rates (\$/hr)^a	
Morning (1.125 x 6.8025)	7.65
Afternoon (1.15 x 6.8025)	7.82
Night (1.2 x 6.8025)	8.16
Saturday (1.25 x 6.8025)	8.50
Sunday (1.5 x 6.8025)	10.20
Long vehicle allowance	\$3.30/shift
Signing on time per shift	30 mins
Signing off time per shift	15 mins
Leave	
Annual leave of 5 weeks with a 17.5 per cent loading (272.10 x 5 x 1.175)/52	\$30.74/driver/week
Sick leave of 8 days (272.10 x 8/5)/52	\$ 8.37/driver/week
	<u>\$39.11</u>
Payroll tax of 5 per cent	1.96
	<u>\$41.07/driver/week</u>

1. **Staged drivers cost per week** - comprising 35, 52.5, and 52 hours of morning, afternoon and night shifts respectively and 6.5 hours of overtime each day

• Driver wages	9 443.99
• Payroll tax of 5 per cent and workers compensation at 2.68 per cent	725.30
• Leave cost for 31 drivers	1 273.17
• Accommodation (63 nights per week at \$25/night)	1 575.00
Total driver wage cost	<u>\$13 017.46</u>

a. The rate used corresponds to the day on which the major portion of the shift occurs.

2. Deluxe system driver costs per week - comprising 129.25 hours each day

. Driver wages	10 832.35
. Payroll tax (5 per cent) and workers compensation (2.68 per cent)	<u>831.92</u>
	11 664.27
. Leave for 27 drivers ($11\ 664.27 \times (5 + 1.6)/52$)	1 480.45
. Accommodation	<u>700.00</u>
Total driver wage cost per week	13 844.74

3. Interim two-up award labour costs - comprising 129.25 hours each day

. Driver wages	13 997.56
. Payroll tax (5 per cent) and workers compensation (2.68 per cent)	<u>1 075.01</u>
. Leave for 27 drivers	1 108.87
. Accommodation	<u>700.00</u>
Total driver wage cost per week	16 881.44

SCHEDULE 3-OPERATING COSTS

Fuel costs

Consumption	-	40 litres per 100 kilometres
Price	-	49.34 cents per litre
Discount	-	3 cents per litre

Cost per kilometre = 18.54 cents

Oil costs

Consumption	-	2 litres per 1000 kilometres
Price	-	\$1.32 per litre
Discount	-	4 cents per litre

Cost per kilometre = 0.26 cents

Tyres

Tyre life (with 2 retreads)	-	220 000 kilometres
Total cost	-	8 tyres at \$640 each

Cost per kilometre = 2.33 cents

Maintenance

TRB figure, June 1980: Country service operators - maintenance = 8.77 cents per kilometre.

Updating factor based on Transportation Component of CPI (Sydney)
= 1.4825.

Maintenance cost per kilometre = 13.00 cents.

Total operating costs per kilometre = 34 cents.

SCHEDULE 4-ESTIMATED REVENUE

Revenue based on:

- 44 seats per coach
- 75 per cent occupancy rate, that is, 33 seats
- 42 services per week
- where applicable, breakup of fares between adult and concession is 50 per cent adult, 50 per cent concession.

Weekly revenue based on a fare of \$159:

- Weekly revenue = $14 \times 44 \times .75 \times 159 = \$73\,458$

Weekly revenue based on a fare of \$206 with 10 per cent concession:

- Weekly revenue = $(14 \times 44 \times .75 \times 206 \times .5)$
+ $(14 \times 44 \times .75 \times 185.4 \times .5)$
= $\$47\,586 + \$42\,827.4$
= $\$90\,413.40$

REFERENCES

Agnew, R. W. & Valentine, T. J. (1984), *Accidents and Economic Conditions*, Report to the National Road Freight Industry Inquiry.

Australian Bureau of Statistics (ABS), (1977-78) and earlier issues, *Transport and Communication*, Cat. No. 9101.1, New South Wales.

____ (1978a), *1976 Census of Population and Housing: Characteristics of Population and Dwellings*, Australian Bureau of Statistics, Cat. No. 2000.0, Canberra.

____ (1978b), *Australian National Accounts: National Income and Expenditure 1976-77*, Australian Bureau of Statistics, Cat. No. 5204.0, Canberra.

____ (1982), *Estimated Resident Population by Sex and Age: States and Territories of Australia, June 1971 to June 1981*, Australian Bureau of Statistics, Cat. No. 3201.0, Canberra.

____ (1985), 'Domestic Travel and Tourism Survey Australia, 1983', Australian Bureau of Statistics, Cat. No. 9216.0, Canberra.

Australian Standing Committee on Tourism (1984), *Domestic Travel in Australia*, and earlier issues 1983, 1982, 1981 and 1980, Government Printer, South Australia.

Baumol, W. J., Panzar, J. C. & Willig, R. D. (1982), *Contestable Markets and the Theory of Industry Structure*, Harcourt Brace Jovanovich Inc., New York.

Bureau of Transport Economics (BTE) (1981), *National Travel Survey 1977-78: Statistical Adjustments and Final Results*, Occasional Paper 42, AGPS, Canberra.

____ (1984a), *Assessment of the Australian Road System: 1984*, Report 56, AGPS, Canberra.

____ (1984b), *Overview of Australian Road Freight Industry: Submission to National Inquiry 1983*, Occasional Paper 59, AGPS, Canberra.

____ (1985a), *Market Response to Discount Domestic Air Fares*, Occasional Paper 66, AGPS, Canberra.

____ (1985b), *Seminar on Australian Long Distance Surface Passenger Transport 1985: Papers and Proceedings* Sydney, July 1985, AGPS Canberra (in press).

Department of Aviation (1984), *Air Transport Statistics*, various years from 1980, Canberra.

Department of Transport (DoT) (1981), Office of Road Safety, Fatal File, (unpublished).

____ (1983), *Submission by the Office of Road Safety to the National Road Freight Industry Inquiry*, December 1983, AGPS, Canberra.

____ (1985), *Submission to Passenger Coach Safety Inquiry*, April 1985, Federal Office of Road Safety, Canberra.

Director General of Transport (South Australia) (1984), *Transtat*, December 1984, South Australia.

Interstate Commerce Commission (ICC), (1984a), *The Intercity Bus Industry*, Office of Transportation Analysis, Washington DC.

Johnson, G. (1985), *An Airliner Without Wings*, *Truck & Bus Transportation*, 49(9), September pp. 30-36

Johnston, D. K. & Catchpole, A. D. (1980), *An Analysis of the Long Distance Bus Industry in Queensland*, 6th Australian Transport Research Forum, Brisbane, October 1980, Metropolitan Transit Authority, Brisbane.

McDonell, G. J. (1980), *Commission of Enquiry into the NSW Road Freight Industry*, NSWGP, Sydney.

Monaghan, D. (1984), *All Aboard for the Rocky Ride to a National Inquiry*, *Sydney Morning Herald* (SMH), 20-22 August 1984.

National Association of Australian State Road Authorities (NAASRA) (1976), *A Study of the Economics of Road Vehicle Limits*, Sydney.

National Road Freight Industry Inquiry (NRFII) (1984), *Report of the National Road Freight Industry Inquiry*, AGPS, Canberra.

Tasmanian Tourist Bureau (1984), *Tasmanian Travelways*, and earlier issues from 1960, Tasmania.

Tauchen, H., Fravel, F. & Gilbert, G. (1983), 'Cost Structure of the Intercity Bus Industry', *Journal of Transport Economics and Policy*, Vol. XVII, No. 1, pp. 25-37, January 1983.

Western Australia Transport Commission (1984), *Annual Report*, Western Australia.

White, P. R. (1983), Express coach services in Britain since de-regulation, 11th Annual Summer Meeting, Planning and Transport Research and Computation (PTRC) Transport Policy, July 1983, England.

Legislation

New South Wales

State Transport (Co-ordination) Act, 1931
Motor Traffic (Further Amendment) Act, 1983
State Transport (Co-ordination) Amendment Act, 1980
Local Government (Public Vehicles) Amendment Act, 1980
Industrial Arbitration (Amendment Act), 1979
Transport Act, 1930

Northern Territory

Motor Vehicle Amendment Act (No. 2) 1981
Control of Roads Act 1981
Traffic Act 1981

Queensland

Motor Vehicles Insurance Act of 1936
State Transport Act 1960-1981

South Australia

Road and Railway Transport Act, 1931
State Transport Act, 1960-1981
Road Traffic Act, 1961-1981

Tasmania

Traffic Act 1925

Traffic Act 1928

Transport Act 1981

Victoria

Transport Act 1983

Western Australia

Transport Act, 1966-1981

ABBREVIATIONS

AAA	Ansett Airlines of Australia
AAC	Across Australia Coaches
ABCA	Australian Bus and Coach Association
ABRD	Australian Bicentennial Road Development Program
ABS	Australian Bureau of Statistics
ACAC	Australian Conciliation and Arbitration Commission
ADR	Australian Design Rules
ALTP	Australian Land Transport Program
ATAC	Australian Transport Advisory Council
ARTF	Australian Road Transport Federation
BTE	Bureau of Transport Economics
CPI	Consumer Price Index
DMT	Department of Motor Transport
DoT	Department of Transport (Federal)
EWA	East-West Airlines
FCU	Federated Clerks Union
gvm	gross vehicle mass
ICC	Interstate Commerce Commission

NAASRA	National Association of State Road Authorities
NTS	National Travel Survey
NRFII	National Road Freight Industry Inquiry
NTS	National Travel Survey
OEW	Olympic East West
RSG	Road Safety Group
RTA	Road Traffic Authority
SMH	Sydney Morning Herald
SRA	State Rail Authority
STA	State Transport Authority
TAA	Trans Australia Airlines
TRB	Victorian Transport Regulation Board
TWU	Transport Workers Union
USA	United States of America
VIP	Australian VIP Leisure Tours