

Intrastate Bus Services in New South Wales: Trial Entry Liberalisation

Occasional Paper

The Bureau of Transport Economics (BTE) agreed to a request from the Commissioner of the New South Wales Department of Motor Transport (DMT) to undertake a study to monitor a six-month trial. The trial period extended from 17 November 1986 to 17 May 1987 and was confined to the Sydney-Canberra and Sydney-North Coast of New South Wales corridors. The information upon which the results of this study are based was obtained from a review of official statistics relating to passenger travel, information supplied by industry sources, New South Wales Government instrumentalities and from surveys of passengers on bus and train services undertaken by the BTE. The surveys were carried out in January and April 1987 to provide profile characteristics of passengers travelling during peak and off-peak periods respectively.

Subject

Series

Date

A to Z

Search

Results

Print

Exit



Intrastate Bus Services in New South Wales

Trial Entry Liberalisation

© Commonwealth of Australia 1987

ISSN 0157-7085

ISBN 0 644 06784 5

This work is copyright. Apart from any use as permitted under the *Copyright Act 1968*, no part may be reproduced by any process without written permission from the Director Publishing and Marketing AGPS. Inquiries should be directed to the Manager, AGPS Press, Australian Government Publishing Service, G.P.O. Box 84, Canberra, A.C.T. 2601.

FOREWORD

The Bureau of Transport Economics (BTE) agreed to a request from the Commissioner of the New South Wales Department of Motor Transport (DMT) to undertake a study to monitor a six-month trial, initiated by the DMT, liberalising restrictions normally imposed on the market for long distance intrastate bus passenger services.

The trial period in the study extended from 17 November 1986 to 17 May 1987 and was confined to the Sydney-Canberra and Sydney-North Coast of New South Wales corridors.

The study was carried out by a project team from the Systems and Information Branch of the BTE. The study team consisted of D. Short, T. Winn and K. Jones, with assistance from J. L. Murphy in computer analysis and statistical techniques.

The information upon which the results of this study are based was obtained from a review of official statistics relating to passenger travel, information supplied by industry sources, New South Wales Government instrumentalities and from surveys of passengers on bus and train services undertaken by the BTE. The surveys were carried out in January and April 1987 to provide profile characteristics of passengers travelling during peak and off-peak periods respectively.

The BTE wishes to express its appreciation for the assistance given by all those involved in this study.

J. W. Moll
Assistant Director
Planning and Technology Branch

Bureau of Transport Economics
Canberra
November 1987

CONTENTS

	Page	
FOREWORD	iii	
SUMMARY	xiii	
CHAPTER 1	INTRODUCTION	1
	Origin and scope of the study	1
	Structure of the paper	2
CHAPTER 2	INSTITUTIONAL FRAMEWORK	3
	State Transport (Co-ordination) Act	3
	Policy and practices	5
	Conditions and conduct of the trial	6
CHAPTER 3	ANALYSES OF THE TRIAL SERVICES	11
	Intrastate bus services during the trial	11
	Estimated bus, rail and air patronage	13
	Diverted and generated traffic	16
	Trial passenger fares	18
	Passenger profiles	19
	Market impact of the trial	24
CHAPTER 4	CONCLUDING REMARKS	33
APPENDIX I	NEW SOUTH WALES LONG DISTANCE INTRASTATE AND INTERSTATE BUS AND RAIL NETWORK OPERATIONS	35
APPENDIX II	DAILY BUS SERVICES OPERATING ON THE SYDNEY- CANBERRA AND SYDNEY-NORTH COAST NEW SOUTH WALES CORRIDORS, PRIOR TO AND DURING THE TRIAL	41
APPENDIX III	REASONS FOR DIVERTED AND GENERATED 'PASSENGERS ELECTING TO TRAVEL BY BUS	47

	Page
APPENDIX IV	BUS, RAIL AND AIR ADULT FARES FOR SYDNEY-CANBERRA AND SYDNEY-NORTH COAST NEW SOUTH WALES CORRIDORS, PRIOR TO AND DURING THE TRIAL
	51
APPENDIX V	PEAK AND OFF-PEAK SURVEY DESIGN
	57
APPENDIX VI	PROFILE CHARACTERISTICS OF INTRASTATE BUS AND RAIL PASSENGERS
	71
APPENDIX VII	METHODOLOGY FOR CALCULATING THE FINANCIAL IMPACT OF THE TRIAL ON COMPETING MODES OF PUBLIC TRANSPORT
	83
BIBLIOGRAPHY	87
ABBREVIATIONS	89

TABLES

	Page
3.1 National and intrastate bus operators participating in the trial, by corridor: 17 November 1986 to 17 May 1987	12
3.2 Estimated bus, rail and air patronage over trial corridors during peak and off-peak periods	14
3.3 Estimates of diverted and generated intrastate bus patronage during trial, by corridor	17
3.4 Distribution of bus and rail patronage by purpose of travel	20
3.5 Distribution of bus and rail patronage by fare type	21
3.6 Distribution of bus and rail patronage and New South Wales population by sex	22
3.7 Distribution of bus and rail patronage and New South Wales population by age	22
3.8 Distribution of bus and rail patronage by occupational status	23
3.9 Distribution of bus and rail patronage by length of stay at destination	24
3.10 Financial impact of trial bus services on rail and air operations, by corridor	32
II.1 Daily bus services on the Sydney-Canberra corridor: October 1986 to May 1987	42
II.2 Daily bus services on the Sydney-North Coast corridor: October 1986 to May 1987	44

	Page
III.1 Distribution of bus passengers diverted from other modes by reason(s) for travelling by bus	48
III.2 Distribution of generated bus passengers by reason(s) for travelling by bus	49
IV.1 Adult passenger fares for bus, rail and air services over trial corridors: November 1986	52
IV.2 Adult passenger fares for bus, rail and air services over trial corridors: March 1987	54
V.1 Intrastate and interstate bus services surveyed over trial corridors: 14 to 21 January 1987 and 2 to 8 April 1987	58
V.2 Intrastate rail services surveyed over trial corridors: 14 to 21 January 1987 and 2 to 8 April 1987	60
VI.1 Distribution of sample of bus and rail patronage by purpose of travel: Sydney-Canberra corridor	72
VI.2 Distribution of sample of bus and rail patronage by purpose of travel: Sydney-North Coast corridor	73
VI.3 Distribution of sample of bus and rail patronage by fare type: Sydney-Canberra corridor	74
VI.4 Distribution of sample of bus and rail patronage by fare type: Sydney-North Coast corridor	75
VI.5 Distribution of sample of bus and rail patronage by sex: Sydney-Canberra corridor	76
VI.6 Distribution of sample of bus and rail patronage by sex: Sydney-North Coast corridor	76
VI.7 Distribution of sample of bus and rail patronage by age: Sydney-Canberra corridor	77
VI.8 Distribution of sample of bus and rail patronage by age: Sydney-North Coast corridor	78

	Page
VI.9 Distribution of sample of bus and rail patronage by occupation: Sydney-Canberra corridor	79
VI.10 Distribution of sample of bus and rail patronage by occupation: Sydney-North Coast corridor	80
VI.11 Distribution of sample of bus and rail patronage by length of stay at destination: Sydney- Canberra corridor	81
VI.12 Distribution of sample of bus and rail patronage by length of stay at destination: Sydney-North Coast corridor	82
VII.1 Distribution of bus fares paid by passengers diverted from air and rail services, by corridor	84
VII.2 Rail and air fares used in analysing the financial impact of the bus trial on competing modes of public transport: Sydney-Canberra corridor	85
VII.3 Weighted average rail and air fares used in analysing the financial impact of the bus trial on competing modes of public transport: Sydney-North Coast corridor	85

FIGURES

	Page
2.1 Long distance intrastate bus corridors in New South Wales selected for trial: 17 November 1986 to 17 May 1987	8
3.1 Frequency of weekly bus services by time of day on the Sydney-Canberra corridor	25
3.2 Frequency of weekly bus services by time of day on the Sydney-North Coast corridor	26
3.3 Frequency of weekly rail services by time of day on the Sydney-Canberra corridor	28
3.4 Frequency of weekly rail services by time of day on the Sydney-North Coast corridor	29
3.5 Frequency of weekly regional air services by time of day on the Sydney-Canberra corridor	30
3.6 Frequency of weekly regional air services by time of day on the Sydney-North Coast corridor	31
I.1 Licensed long distance intrastate bus services in New South Wales, 1986	36
I.2 Corridors over which Ansett Pioneer interstate bus services had approval to pick-up and set-down intrastate passengers in New South Wales, 1986	37
I.3 Corridors over which Greyhound interstate bus services had approval to pick-up and set-down intrastate passengers in New South Wales, 1986	38

		Page
I.4	Intrastate corridors over which interstate bus services had approval to pick-up and set-down passengers in New South Wales, 1986	39
I.5	New South Wales rail passenger services, 1986	40

SUMMARY

In September 1985 the New South Wales Minister for Transport directed the New South Wales Department of Motor Transport (DMT) to undertake a 'Review of Intrastate Long Distance Bus Services'. As part of this Review the DMT initiated a six-month trial liberalising entry into and exit from the intrastate bus market in New South Wales.

In October 1986 the BTE agreed to a request from the Commissioner for Motor Transport to undertake an independent study to monitor the impact that the trial would have on the travelling public and competing modes of public transport.

The six-month trial was restricted to the Sydney-Canberra and Sydney-North Coast corridors which parallel rail links in New South Wales. Prior to the commencement of the trial, Ansett Pioneer held the licence to operate express bus services between Sydney and Canberra. On the Sydney-North Coast corridor, Skennars Coaches were licensed to operate an express bus service between Sydney and Port Macquarie and Kirkland Bros Omnibus Services held the licence to operate an express bus service between Sydney and Ballina.

Of the twelve bus operators who provided services during the trial period, three were granted permits to operate over both corridors, one was granted a permit to provide services over the Sydney-Canberra corridor, and eight operators were granted permits to provide services on the Sydney-North Coast corridor. One of the entrants operating solely on the Sydney-North Coast corridor did not commence services until March 1987.

For the purpose of the trial only express bus services were allowed to operate on the Sydney-Canberra corridor. On the Sydney-North Coast corridor bus operators were required to transport passengers over a journey of at least 160 kilometres, and were not granted pick-up and set-down rights for passengers travelling solely between Sydney and Newcastle.

The major beneficiaries of the trial were the travelling public. The

trial stimulated competition between bus operators on both corridors resulting in fare reductions and expanded services. Bus fares were reduced by \$5 on the Sydney-Canberra corridor and by about \$10 on the Sydney-North Coast corridor at the commencement of the trial. Despite increases during the trial, fares were still lower at the end of the trial than prior to its commencement.

Compared with the same period 12 months earlier, demand for bus services during the six-month trial on the Sydney-Canberra corridor increased by over 80 per cent and on the Sydney-North Coast corridor by more than 130 per cent. It was estimated in the study that 52 000 bus passengers were diverted from other modes of transport on the Sydney-Canberra corridor and 31 000 on the Sydney-North Coast corridor. In addition, generated bus trips during the trial were estimated to be 8000 and 10 000 on the respective corridors.

The major 'disbenefit' arising from the trial was the significant impact that bus services had on the revenue flows of competing modes of public transport over both corridors. The estimated fall in rail passenger revenue on the Sydney-Canberra corridor was \$433 000 and the Sydney-North Coast corridor \$399 000. The loss in revenue to regional airlines over the two corridors was estimated at \$247 000 and \$471 000 respectively.

Despite these losses in revenue, neither railway nor airline management, except East-West Airlines, responded to either price or service competition emanating from the bus companies during the six-month trial. Towards the end of the trial period East-West Airlines offered a 40 per cent discount on air fares on the Sydney-North Coast corridor.

Analysis of the market structure for bus services during the trial revealed that, on the Sydney-Canberra corridor, two of the four bus operators providing services dominated the market, carrying around 80 per cent of passengers between them. On the Sydney-North Coast corridor, patronage was more evenly distributed among the operators. Over this corridor, eight of the original ten operators shared nearly 90 per cent of the market.

Leisure, particularly travelling to visit friends and relatives, was the main reason for passengers using intrastate bus services. Female passengers accounted for more than half of the passengers using bus services on both corridors. Approximately one-half of the bus passengers were under 30 years of age while passengers 60 years of age and over constituted about one-quarter of the bus passenger market.

On the Sydney-Canberra corridor over 70 per cent of bus passengers paid full fare for their journey during the trial. In comparison, 55 per cent of rail passengers travelled by some form of concessional fare. On the Sydney-North Coast corridor an estimated 54 per cent of bus passengers paid full fare, whereas 70 per cent of rail passengers travelled by concessional fares.

Finally, the overall assessment of the trial is that the market for intrastate bus services was highly competitive over the two trial corridors. This assessment is based on the significant reduction in bus fares that occurred as a result of the trial, the apparent ease with which bus proprietors could enter or leave the market, the availability of similar technology to all operators and the conditions of the trial which restricted incumbents from engaging in predatory pricing practices.

CHAPTER 1 INTRODUCTION

In this Paper the impact of the partial deregulation of intrastate long distance bus services in New South Wales for a trial period of six months is examined. The trial commenced on 17 November 1986 and formed part of a larger review of long distance intrastate bus services being undertaken by the New South Wales Department of Motor Transport (DMT).

The emphasis in the study has been on the impact that relaxing restrictions normally imposed on long distance bus services in New South Wales had on the travelling public, bus operators and competing modes of public transport, particularly the New South Wales State Rail Authority long distance rail passenger services.

ORIGIN AND SCOPE OF THE STUDY

In September 1985, the New South Wales Minister for Transport directed the DMT to undertake a 'Review of Intrastate Long Distance Bus Services'. The review was initiated as a result of complaints from the public that they were not allowed to use existing interstate and intrastate express bus services passing through towns. Another factor influencing the decision to undertake the review was the recognition by the New South Wales Government of the transport needs of tourism in the State.

In accordance with the terms of reference for the review the DMT was required to assess, *inter alia*, the benefits and costs of regulating long distance bus services, including the effects of relaxing restrictions imposed on these services (Saffron 1986a).¹ Towards this end, the DMT conducted a trial during which the restrictions normally

-
1. Under the terms of reference for the review, long distance bus services are defined as those carrying passengers in excess of 80 kilometres in New South Wales. In this study no distinction is made between a bus and a coach. However, some sections of the industry contend that there is a difference and that a coach, in contrast to a bus, is more luxuriously appointed, for example, having better quality seating as well as rest rooms, and is used for long distance operations.

imposed on the operations of intrastate long distance bus services in New South Wales were relaxed. The trial was conducted over the Sydney-Canberra and Sydney-North Coast New South Wales corridors, and though scheduled to finish on 17 May 1987, was subsequently extended to 6 October 1987 to coincide with the termination of a similar trial being conducted on the south coast of New South Wales.²

In October 1986, the BTE agreed to a request from the Commissioner for Motor Transport to undertake an independent study to monitor the effects of the trial. The study was restricted to long distance passenger travel over the two corridors mentioned above.

The data for the study were obtained from a review of official statistics relating to passenger travel, information supplied by industry sources, such as bus and airline operators, New South Wales Government instrumentalities and from surveys of bus and train services undertaken by the BTE. Surveys were carried out in January and April 1987 to provide information on peak and off-peak period travel respectively.

STRUCTURE OF THE PAPER

Chapter 2 outlines the institutional framework in which intrastate long distance bus services operate in New South Wales and the main conditions and administrative arrangements during the trial period. The results of the analyses of the trial are presented in Chapter 3. Chapter 4 contains the summary of findings of the study.

2. On 6 March 1987, the DMT announced the commencement of a similar trial over the Sydney-South Coast New South Wales corridor. This trial is scheduled to terminate on 8 October 1987 and is being monitored by the New South Wales State Transport Study Group.

CHAPTER 2 INSTITUTIONAL FRAMEWORK

This chapter provides the background to the study by outlining the institutional framework governing the operations of privately owned long distance bus services in New South Wales. The framework consists of legislation enacted by the New South Wales Parliament and the administration of the policy emanating from this legislation.

The chapter also provides an overview of the main conditions and the resulting administration of the trial conducted by the Department of Motor Transport (DMT), which liberalised entry into and exit from the long distance intrastate bus market in New South Wales.

STATE TRANSPORT (CO-ORDINATION) ACT

There are a number of Acts which impact on the operations of long distance bus services in New South Wales. However, the main legislation determining the institutional framework which is relevant to this study is the State Transport (Co-ordination) Act 1931 (NSW), and the associated State Transport (Co-ordination) Regulations 1931. It is this legislation which, *inter alia*, governs the regulation of the market for long distance intrastate bus services in New South Wales.¹ By concentrating on this specific legislation it is not intended to deny the significance of other legislation, the provisions of which bus operators must conform to if they are to provide services to the public.

The State Transport (Co-ordination) Act came into force in August 1931. The stated intention of the Act is 'to provide for the improvement and for the co-ordination of means of and facilities for locomotion and transport'.

1. Bus services which are operated wholly within the Metropolitan (Sydney area), Newcastle and Wollongong Transport Districts in New South Wales are regulated under the Transport Act 1930 (NSW).

Under the provisions of this legislation the power to regulate the market for long distance bus services in New South Wales resides with the Commissioner for Motor Transport. A potential entrant into the industry proposing to operate a service solely within New South Wales is required under section 14(1) of the Act to make an application to the Commissioner for a licence to operate a vehicle. In turn, the Commissioner is required to assess the application in accordance with the provisions of the Act set out in section 17(3).

These provisions give the Commissioner for Motor Transport discretionary powers to consider any matter he may deem necessary in the assessment of the application. Issues that he may consider in his assessment of an application include whether the proposed service is competitive with an existing service or whether an existing service is adequate.

The Commissioner for Motor Transport also has the power, under section 22(1) of the Act, to issue a permit authorising the operation of an intrastate bus service. As with a licence, a permit to operate a service specifies the conditions that apply to the service. However, in contrast to a licence², the permit may be revoked or varied at any time by the Commissioner.

Where an applicant for a licence or permit is successful the Commissioner for Motor Transport sets out the conditions applicable to the licence or permit in accordance with the State Transport (Co-ordination) Regulations. These provisions may include the route over which the service operates, pick-up and set-down points for passengers, specification of any part of the route as an express service, the fares which can be charged and the frequency of services.

Interstate long distance bus services

Since the High Court decision in 1955 (*Hughes and Vale v. New South Wales* (1955) 93 CLR 127) which in effect exempted interstate road transport from State economic regulations, long distance interstate bus services passing through New South Wales have not been subjected to New South Wales licensing laws. Nevertheless, interstate bus operators have been granted authorisation, as distinct from a licence, by the Commissioner for Motor Transport to pick-up and set-down intrastate passengers in New South Wales.

2. Section 16(2) of the Act specifies that a licence expires on the date upon which the current registration of the vehicle under the Motor Traffic Act 1909 expires.

Under section 19(1) of the Act the Commissioner for Motor Transport has the power to grant an operator an exemption from the requirement to obtain a licence. However, interstate operators granted the right to pick-up and set-down intrastate passengers in New South Wales, while not specifically granted an exemption from obtaining a licence, are provided with a letter of authority from the Commissioner to operate an intrastate service. According to the DMT this procedure technically avoids the possibility that operators may be in breach of the Act by failing to obtain a licence (DMT, pers. comm. 1986).

Whereas the bus operator specifies the route over which an authorisation to carry intrastate passengers is sought, the Commissioner specifies the points on the route where pick-up and set-down rights are permitted. A further condition associated with the granting of the authorisation was that the operator had to give concessions where applicable in New South Wales. The operator was then reimbursed the difference between the concession fare and full fare by the DMT.

POLICY AND PRACTICES

Prior to the commencement of the trial on 17 November 1986 there were 17 long distance intrastate bus passenger licences operative in New South Wales and 14 interstate services with authority to carry intrastate passengers (refer to Appendix I). Examination of the routes over which these services operated indicates that, in general, the licences and authorisations granted by the Commissioner for Motor Transport have been for services that are not competitive with the New South Wales State Rail Authority (SRA) long distance rail passenger services (refer to Appendix I).

In the north-east corner of the State bus services generally run in an east-west direction while the rail services run north-south. In the southern part of the State this pattern is reversed. Both rail and bus services operate between Sydney and Broken Hill in central west New South Wales. However, over the Sydney-Narromine section of this corridor the bus service operates as an express service only, as it would otherwise be in direct competition with the rail passenger services. Over the remaining section of this corridor the routes followed by the bus and rail services diverge and consequently the services are not in direct competition.

There were, prior to the trial, notable exceptions to the granting of intrastate bus licences in New South Wales on corridors also served by long distance rail passenger services. These included services

operating between Sydney and Ballina and between Sydney and Port Macquarie on the north coast of New South Wales, and the service operating between Sydney and Canberra. Licences for the first two services were granted in the early 1970s to promote tourism. The Sydney-Canberra licence was originally granted in 1956, though the reason for granting the licence appears to be lost in antiquity (Saffron 1986a). In addition, only one operator on each corridor was granted a licence on condition that the licences were for express services only. Consequently, unlike the competing rail services, these operators were not allowed to pick-up and set-down passengers en route.

Furthermore, the only routes where the Commissioner for Motor Transport allowed competition between bus services on intrastate routes, prior to the commencement of the trial, were those routes over which interstate operators had intrastate rights to carry passengers (refer to Appendix I).

Taking into account the limited number of long distance intrastate bus services in New South Wales and the relatively long time frame over which some of these services have operated, it is evident that the major factor influencing the Commissioner of Motor Transport in his assessment of an application for a new service is whether the proposed service would be competitive with existing passenger services.

In summary, the regulation of the market for long distance intrastate bus services operating solely within New South Wales is governed by the State Transport (Co-ordination) Act and associated Regulations. The Regulations have taken the form of restricting entry into the market as well as specifying the routes over which the services operate, the fares charged and the timetable of operations.

Apart from the current trial, long distance intrastate bus services have operated in New South Wales in the manner described for more than 30 years. As the number of services allowed to operate over this period has been restricted it seems apparent that the DMT has implemented successive government policies aimed at not only protecting long distance rail passenger services, but also restricting competition between long distance intrastate bus services, particularly those services operating solely within New South Wales.

CONDITIONS AND CONDUCT OF THE TRIAL

The trial was restricted to the Sydney-Canberra and the Sydney-North Coast corridors which parallel rail links in New South Wales. For the purpose of the trial the north coast of New South Wales was defined as

that part of the State north of the Hunter River and on or east of the Pacific Highway (refer to Figure 2.1).

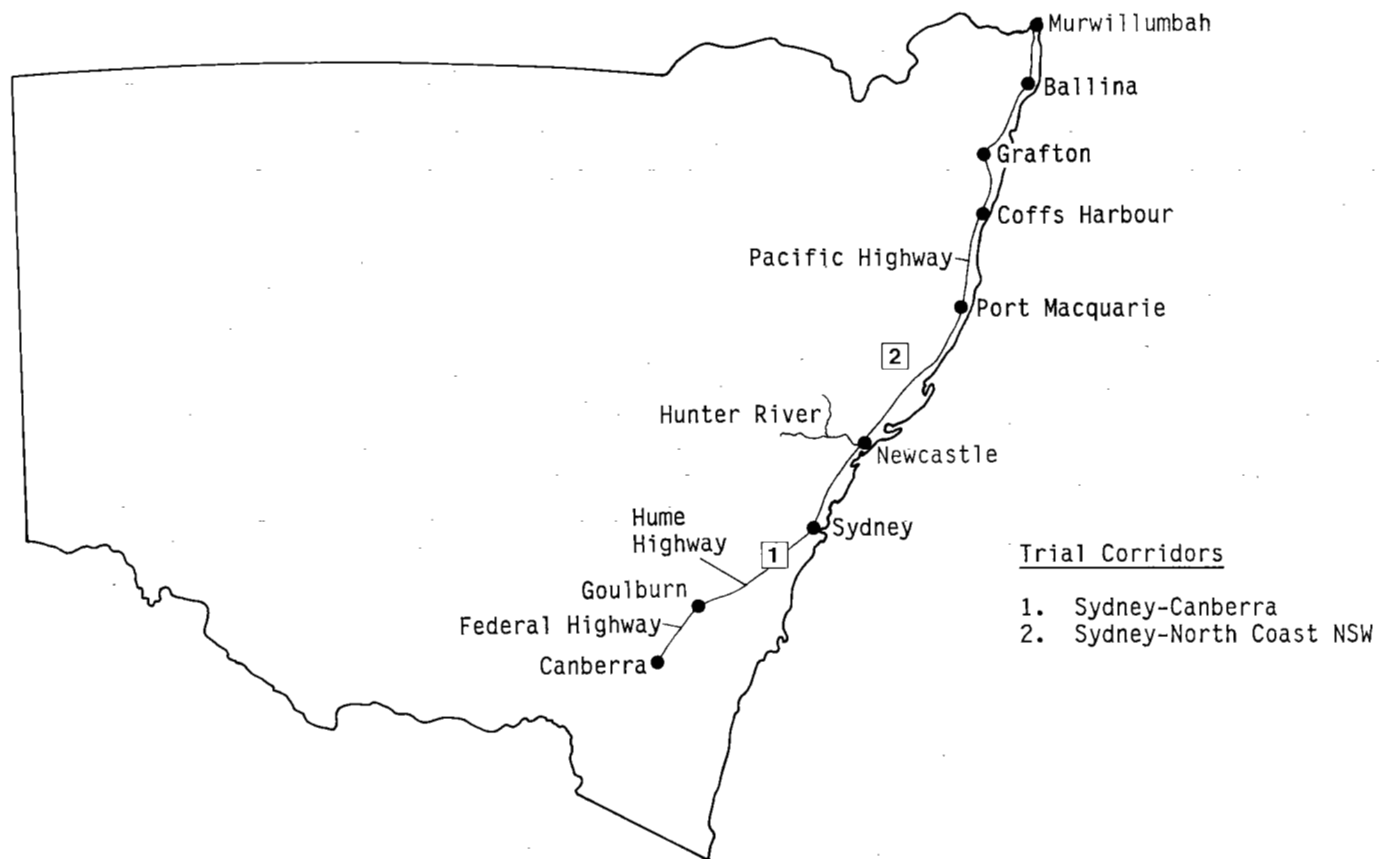
Prior to the commencement of the trial licensed operators provided express services over each corridor. Ansett Pioneer was the sole operator licensed to provide two daily services each way between Sydney and Canberra. On the North Coast corridor Skennars Coaches were licensed to operate three daily services each way between Sydney and Port Macquarie and Kirkland Bros. Omnibus Services were licensed to operate two daily services each way between Sydney and Ballina (refer to Appendix I).

Throughout the trial the Sydney-Canberra corridor was retained as an express route. On the Sydney-North Coast corridor bus operators were required to transport passengers over a journey of at least 160 kilometres, and were not granted pick-up and set-down rights for passengers travelling solely between Sydney and Newcastle. Nevertheless, bus operators were allowed to pick-up passengers at points located between Sydney and Newcastle who were travelling north, or set-down passengers between these two cities who were travelling south, provided that the passengers travelled the minimum required distance of 160 kilometres.

Thus it was possible to arrange a bus trip between Canberra and towns on the Sydney-North Coast corridor, north of Newcastle. However, the restrictions on bus operators on both corridors prohibited passage either between Canberra and the Sydney-Newcastle section of the Sydney-North Coast corridor, or between towns located on the Sydney-Canberra corridor and the Sydney-Newcastle section of the Sydney-North Coast corridor, even though the journey via Sydney would exceed 160 kilometres.

The rationale for stipulating the minimum length of a passenger journey was to protect local bus services on the Sydney-North Coast corridor. The reason for restricting operators to express services on the Sydney-Canberra corridor and between Sydney and Newcastle was to protect SRA rail passenger services.

Despite the constraints placed on the rights to pick-up and set-down passengers on each corridor, an objective of the trial was to identify the effects arising from an improved competitive environment for long distance passenger services. A major feature of this objective was the easing of the restrictions regarding entry into and exit from the market. Consequently, no restrictions were placed on the number of operators who sought to provide services over each corridor.



Source New South Wales Department of Motor Transport (pers. comm. 1986).

Figure 2.1 Long distance intrastate bus corridors in New South Wales selected for trial:
17 November 1986 to 17 May 1987

Bus operators who wished to participate in the trial had to obtain a permit from the DMT for each bus and for each corridor over which they intended to provide a service. A nominal fee of \$2 per permit was levied by the DMT. Permits were granted if, in the opinion of the Commissioner for Motor Transport, the operator could provide safe and reliable services.

During the trial operators were given the freedom to set fares and change services. However, under the conditions of the trial, operators were required to give the DMT 14 days notice of any intended change to fares or services. While the DMT retained the right to disagree to any change in services, it was not uncommon for the Department to waive the time requirement so that operators did not incur unnecessary costs. For example, if there was no demand for a particular service, the DMT permitted the operator to withdraw the service at short notice.

Prior to the trial, the DMT paid licensed operators on each corridor subsidies offsetting the difference between concessional fares for pensioners and the unemployed and the full adult fare. The DMT continued payment of the subsidy to these operators during the course of the trial, subject to a limit of the total amount paid to each operator for the corresponding period during the previous 12 months. The conditions of the trial stipulated that, except for the above subsidies, the DMT was not required to subsidise any concessional fares offered by bus operators during the course of the trial.

CHAPTER 3 ANALYSES OF THE TRIAL SERVICES

This chapter presents the results of the analyses of the trial liberalising entry into and exit from the New South Wales long distance intrastate bus market. The analyses involved consideration of the supply of and demand for bus services and an overall assessment of the trial with particular emphasis on the financial impact that the bus services had on New South Wales rail passenger services and regional air services.

In addition, the results of the analyses of the profile characteristics of bus and rail passengers are presented. The information upon which the analyses were based was derived from the peak and off-peak bus and rail surveys conducted by the BTE.

INTRASTATE BUS SERVICES DURING THE TRIAL

The New South Wales Department of Motor Transport (DMT) received applications for permits to participate in the trial from 19 bus operators consisting of both national and intrastate operators. A total of 16 bus operators were granted permits to operate scheduled daily services during the trial. However, four of the successful applicants decided not to commence operations and their permits were subsequently withdrawn by the DMT.

Of the remaining 12 successful applicants (refer to Table 3.1) three were granted permits to operate over both corridors, one was granted a permit to operate over the Sydney-Canberra corridor, and eight applicants were granted permits to provide services on the Sydney-North Coast corridor. One of the entrants operating solely on the Sydney-North Coast corridor did not commence services until March 1987.

In general, operators used their existing fleets to meet the demand arising from the trial. The configurations of bus types in the fleets included single and double deckers, with seating capacities ranging from 44 to 66 seats. Some fleets consisted of single deck buses only, while other fleets had a combination of single and double deck buses.

TABLE 3.1 NATIONAL AND INTRASTATE^a BUS OPERATORS PARTICIPATING IN THE TRIAL, BY CORRIDOR: 17 NOVEMBER 1986 TO 17 MAY 1987

<i>Sydney-Canberra corridor</i>		<i>Sydney-North Coast corridor</i>	
<i>National operators</i>	<i>Intrastate operators</i>	<i>National operators</i>	<i>Intrastate operators</i>
Deluxe Coachlines	Murrays	Deluxe Coachlines	Lindsay's Coach Service
Ansett Pioneer		Ansett Pioneer	Port Stephens
Greyhound		Greyhound	Buses
		Skennars Coaches	Sid Fogg & Sons
		Kirkland Bros	
		Omnibus Services	
		Intertour EET	
		VIP Express Coaches	
		McCafferty's	

a. Intrastate bus operators are defined as those operators providing intrastate bus services only.

Source DMT (pers. comm. 1986).

As a number of intrastate bus services formed part of bus companies interstate network services it was not possible for the BTE to obtain information relating to the size of specific bus fleets used in the trial.

None of the bus operators specifically purchased new vehicles for the trial. Nevertheless, new vehicles were used to provide trial services. In some cases the use of new buses was a deliberate promotional ploy by the operator in an endeavour to attract customers. However, the BTE was advised by all operators who employed new vehicles during the trial that their purchase was part of the normal upgrading of their fleet and would have occurred despite the advent of the trial.

Throughout the trial it was not uncommon for bus companies to operate more than one bus per service to meet demand. However, information relating to the number of buses per service was not made available to the BTE.

At the commencement of the trial there were 43 services per day on the Sydney-Canberra corridor, a ten fold increase over the pre-trial service level (refer to Appendix II). Of the total services 17 were

part of interstate networks operated by national carriers with permits to carry intrastate passengers, while the remaining services were dedicated intrastate services operated by both national and intrastate carriers.

During the December-January period of the trial, daily services between Sydney and Canberra increased to 45 per day to cater for the peak period demand. However by March 1987 daily services were reduced to 40 services per day in response to reduced passenger demand in the off-peak period. Despite a peak period occurring in the month of April, services remained at this level throughout the remainder of the trial.

Similarly, at the beginning of the trial on the Sydney-North Coast corridor there were 60 services per day, a five fold increase over the number of pre-trial services (refer to Appendix II). Of the total services operating on this route 18 were part of interstate networks operated by national carriers.

Unlike the Sydney-Canberra corridor, services on the Sydney-North Coast corridor during the peak December-January period fell marginally to 58 services per day. By March 1987 daily services were reduced to 52 services in response to reduced demand in the off-peak period and remained at that level until the end of the trial in May.

In addition to rationalising services to meet longer term demand variations, bus operators responded to short term fluctuations in demand by employing either different vehicle types or varying the number of buses used per service. For example, some operators used double decker buses to cater for short term increases in demand while others used 'double' or 'triple' headers, that is, operated two or three buses per service.

ESTIMATED BUS, RAIL AND AIR PATRONAGE

Table 3.2 shows the estimated demand for bus, rail and air services over the two trial corridors. For bus and rail services, estimates are expressed in terms of peak and off-peak patronage. Similar information was not available for air travel.

For the Sydney-Canberra corridor a distinction is made between passengers travelling the entire journey between Sydney and Canberra and all corridor traffic, to enable a direct comparison to be made of the market for bus, rail and air services during the trial period. A similar dissection is made for the Sydney-North Coast corridor, but in terms of intrastate and all corridor traffic, thus allowing a direct

comparison of the market for bus, rail and air services over this corridor.

Table 3.2 shows that bus and rail services catered for just under half (269 000 passengers) of the estimated demand for all corridor traffic using public transport on the Sydney-Canberra corridor during the six-month trial. However, these two services only catered for 37 per cent (209 000 passengers) of the market for passengers travelling the entire journey between Sydney and Canberra, the buses carrying 134 000 and rail 75 000 passengers.

An estimated 100 000 passengers travelled by bus and rail over the Sydney-Canberra corridor during the peak periods and 169 000 passengers during the off-peak periods. Over the six-month trial period air catered for 303 000 passengers. Intrastate bus patronage (134 000 passengers) constituted about two-thirds of bus and rail passengers (209 000) and just over one-quarter of all passengers (512 000) travelling the entire journey between Sydney and Canberra.

TABLE 3.2 ESTIMATED BUS, RAIL AND AIR PATRONAGE OVER TRIAL CORRIDORS DURING PEAK AND OFF-PEAK PERIODS^a
('000 passengers)

Type of traffic by route	Bus			Rail			Air ^b
	Peak	Off- peak	Total	Peak	Off- peak	Total	Total
Sydney-Canberra corridor							
Traffic from							
Sydney to Canberra	26	37	63	11	24	35	150
Canberra to Sydney	30	41	71	13	27	40	153
Total	56	78	134	24	51	75	303
All corridor traffic							
Sydney to Canberra	27	37	64	22	47	69	150
Canberra to Sydney	31	42	73	20	43	63	153
Total	58	79	137 ^c	42	90	132 ^d	303

TABLE 3.2 (Cont.) ESTIMATED BUS, RAIL AND AIR PATRONAGE OVER TRIAL CORRIDORS DURING PEAK AND OFF-PEAK PERIODS^a
(^{'000 passengers})

Type of traffic by route	Bus			Rail			Air ^b
	Peak	Off-peak	Total	Peak	Off-peak	Total	Total
Sydney-North Coast corridor							
Intrastate traffic							
Northbound	23	26	49	31	64	95	209
Southbound	21	27	48	33	69	102	183
Total	44	53	97 ^f	64	133	197 ^f	392
All corridor traffic							
Northbound	74	85	159	66	137	203	209
Southbound	72	91	163	56	117	173	183
Total	146	176	322 ^g	122	254	376 ^h	392

a. Peak periods extended from 19 December 1986 to 3 February 1987 and from 16 April 1987 to 27 April 1987, and off-peak periods extended from 17 November 1986 to 18 December 1986, from 4 February 1987 to 15 April 1987 and from 28 April 1987 to 17 May 1987.

b. Includes both regional and trunk route airline passengers travelling over the Sydney-Canberra corridor and only regional airline passengers travelling over the Sydney-North Coast corridor.

c. Includes both intrastate and interstate bus passengers.

d. Includes all rail passengers travelling over the Sydney-Canberra corridor.

f. Includes only intrastate passengers travelling distances of at least 160 kilometres.

g. Includes interstate passengers.

h. Includes intrastate rail passengers travelling less than 160 kilometres, but excludes passengers travelling on the Sydney-Newcastle services.

Sources BTE estimates based on information supplied by the SRA, bus operators and the Department of Aviation.

A direct comparison of the market for passengers travelling the entire journey between Sydney and Canberra shows that, in terms of average daily patronage over the six-month trial buses carried 736 passengers, rail 412 passengers and the airlines 1665 passengers.

Over the Sydney-North Coast corridor bus and rail services carried nearly two-thirds (698 000 passengers) of all traffic using public transport during the six months of the trial. An estimated 268 000 passengers used both bus and rail services during the peak periods of the trial and 430 000 passengers during the off-peak periods. Of the total market (1 090 000) over this corridor intrastate rail and bus patronage constituted just over one-quarter (294 000 passengers) of which nearly 70 per cent (197 000 passengers) travelled by rail transport.

In the market for intrastate traffic, bus operators on the North Coast corridor carried, on average, fewer passengers per day than either the railways or the airlines during the trial. The buses carried 533 passengers, rail 1082 passengers and the airlines 2154 passengers per day.

The increase in demand for bus travel during the trial on the Sydney-Canberra corridor compared with the same period 12 months earlier was approximately 80 per cent. Similarly, on the Sydney-North Coast corridor the estimated increase in demand for bus travel was 130 per cent.

Information available to the BTE was not sufficiently detailed to enable reliable estimates of bus load factors to be calculated. However, despite the significant increase in both the demand for and supply of bus services the most efficient utilisation of buses appears to have occurred where intrastate services formed part of an interstate network.

An analysis of the market shares of intrastate bus services over the trial period was undertaken. This analysis revealed that on the Sydney-Canberra corridor, of the four operators providing services two dominated the market, carrying collectively 80 per cent of passengers.

On the Sydney-North Coast corridor there were ten operators who provided services during the first four months of the trial with a new operator entering the trial in March 1987. Patronage was more evenly distributed among the operators on this corridor, with eight of the original ten operators sharing nearly 90 per cent of the market.

DIVERTED AND GENERATED TRAFFIC

Diverted patronage refers to those passengers who had in the past two years made similar journeys travelling by an alternative mode of transport and who would have made the current trip by the alternative mode of transport if the bus services were not available. Generated

patronage refers to as the journeys made by new passengers together with any additional journeys made by existing passengers as a result of the new services. However, the lack of detailed information prevented estimation of the proportions of these latter sub-categories.

Table 3.3 provides ranges for the estimates of the patronage diverted to bus services from other modes of transport and the number of generated trips. Out of the estimated bus patronage of 134 000 passengers (Table 3.2), the estimated number of passengers diverted from other modes of transport to the bus services on the Sydney-Canberra corridor range from 47 000 to 57 000. Similarly, on the Sydney-North Coast corridor the range extended from 26 000 to 36 000 passengers. The estimates for generated trips range from 5000 to 11 000 on the Sydney-Canberra corridor and 6000 to 14 000 on the Sydney-North Coast corridor.

Analysis of the survey data (refer to Appendix III for details) indicated that, on the Sydney-Canberra corridor, fare reduction was the factor which most influenced the decision of passengers to divert to bus travel from competing modes of public transport. Departure and arrival times and pick-up and set-down points also influenced the decisions to travel by bus. Similar reasons influenced bus passengers on the North Coast corridor. However, fare reductions did not appear to have as much influence on this corridor as they did on the Sydney-Canberra corridor.

Generated passengers nominated the same reasons for travelling by bus

TABLE 3.3 ESTIMATES OF DIVERTED AND GENERATED INTRASTATE BUS PATRONAGE DURING TRIAL, BY CORRIDOR
('000)

Corridor	Diverted traffic				Generated traffic
	Rail	Air	Car	Total	
Sydney-Canberra ^a	21-31	2-6	17-27	47-57	5-11
Sydney-North Coast	13-19	2-6	7-13	26-36	6-14

a. Ranges represent the 95 per cent confidence limits of the estimates.

Source Based on BTE surveys of bus and rail passengers (1987).

as diverted patronage. However, they also gave 'no alternative transport' as a reason for travelling by bus.

TRIAL PASSENGER FARES

The general strategy adopted by bus operators to promote their services prior to and during the trial was to advertise through the mass media. Some operators also toured trial corridors with new buses before and during the early stages of the trial to promote their services.

Prior to the trial Ansett Pioneer was the sole licensed operator on the Sydney-Canberra corridor. The adult fare just prior to the trial between Sydney and Canberra was \$20. The promotions by bus operators leading up to the trial advertised adult fares between Sydney and Canberra ranging from \$15 to \$30. However, at the commencement of the trial the fare actually charged by all bus companies was \$15. Fares remained unchanged until March 1987 when three companies raised the fare to \$18 and one company to \$17 (refer to Appendix IV).

On the Sydney-North Coast corridor the pre-trial bus fare on the Sydney-Ballina route was \$39. At the commencement of the trial fares between these two centres ranged from \$28 to \$35. In March 1987 there was a general increase in fares on this route resulting in fares ranging from \$32 to \$35.

On the Sydney-Port Macquarie route the pre-trial fare was \$32.70. At the commencement of the trial fares between these two centres ranged from \$23 to \$25. In March 1987 fares were increased to \$25, with the exception of one operator who reduced the fare to \$19.

Throughout the duration of the trial the rail economy fare between Sydney and Canberra was \$21.30. Along the Sydney-North Coast corridor, economy rail fares either matched or were slightly higher than bus fares during the trial. Thus throughout the trial period the New South Wales State Rail Authority (SRA) did not alter fares on either corridor in response to increased competition from bus operators.

Airline fares were substantially higher than bus and rail fares on both corridors during the trial. On the Sydney-Canberra corridor regional and trunk economy air fares were \$67 and \$90 respectively. On the Sydney-North Coast corridor regional airline economy fares ranged between \$96 and \$135 for travel between Sydney and Port Macquarie, and \$128 between Sydney and Grafton. In the latter months of the trial, East-West Airlines offered a discount of 40 per cent on

airfares on their Sydney-North Coast services in response to increased fare competition from bus operators. Similar action was not taken by other regional airlines competing over this corridor.

On the Sydney-Canberra corridor a 30 per cent discount Apex fare was offered by East-West Airlines during the six-month trial. However, the BTE was advised that this offer was a response to normal market fluctuations and not in response to increased fare competition from bus operators.

The BTE was subsequently advised that, for a limited period during the time the bus trial was extended, East-West Airlines offered a discounted airfare of \$40 for travel between Sydney and Canberra in response to competition from bus services. The discounted airfare applied from 15 July to 15 August 1987. The \$40 fare was \$5 less than the normal concessional fare for children.

PASSENGER PROFILES

The details underlying the analysis of the passenger profiles were obtained from the bus and rail surveys conducted by the BTE. Copies of the bus and rail questionnaires are shown in Appendix V.

To facilitate the analysis the presentation of the results are expressed in terms of corridor profiles rather than in terms of directional flows or period of travel (refer to Appendix VI for details).

Purpose of travel

Table 3.4 presents the distribution of bus and rail patronage by purpose of travel. The main reasons for travel over both corridors on both modes of transport were visiting friends and relatives, holidays, or a combination of these reasons. Approximately three-quarters of bus passengers and two-thirds of the rail passengers on both corridors cited these reasons for undertaking their journey during the trial.

Fare type

Table 3.5 presents the distribution of bus and rail patronage by fare type. For the purpose of this study concessional fares were defined as any discounted adult fare, including child fares. The results show that over 70 per cent of bus passengers on the Sydney-Canberra corridor paid full fare during the six-month trial period, while just over 50 per cent of bus passengers on the Sydney-North Coast corridor paid full fare. A significant proportion of bus passengers over both corridors paid concessional fares, over 25 per cent on the former corridor and in excess of 40 per cent on the latter corridor.

TABLE 3.4 DISTRIBUTION OF BUS AND RAIL PATRONAGE BY PURPOSE OF TRAVEL
(per cent)

Purpose of travel	Bus		Rail	
	Sydney- Canberra corridor	Sydney- North Coast corridor	Sydney- Canberra corridor	Sydney- North Coast corridor
Holiday	19	24	20	27
VFR ^a	41	42	33	34
Holiday and VFR	16	9	13	16
Business and VFR	3	4	3	4
VFR, holiday and business	0	0	1	1
Holiday and business	0	1	1	1
Business	17	18	29	16
Other	0	0	0	0
Non-response	4	2	0	1
Total	100	100	100	100

a. Visiting friends and relatives.

Source Based on BTE surveys of bus and rail passengers (1987).

By comparison, a larger proportion of rail passengers paid concessional fares for their journeys over both corridors during the trial. On the Sydney-Canberra corridor concessional fares accounted for over 50 per cent of the patronage, while on the Sydney-North Coast corridor concessional fares made up 70 per cent of the market.

Sex and age distributions

Tables 3.6 and 3.7 present the distribution of bus and rail patronage by sex and age respectively. In addition, each table illustrates the comparative distribution of the New South Wales population.

Females made up approximately 60 per cent of passengers on both modes of transport on both corridors. This compares with the proportion of the female population in New South Wales of 51 per cent. In terms of the age distribution, approximately half of the bus passengers were under 30 years of age, whereas approximately 60 per cent of rail passengers were over 30 years of age.

TABLE 3.5 DISTRIBUTION OF BUS AND RAIL PATRONAGE BY FARE TYPE
(per cent)

Fare type	Bus		Rail	
	Sydney- Canberra corridor	Sydney- North Coast corridor	Sydney- Canberra corridor	Sydney- North Coast corridor
Full fare	71	54	45	30
Pensioner concession/ free voucher ^a	4	18	17	37
Student/child concession	22	25	27	19
Other concessions ^b	3	2	11	14
Non-response	0	1	0	0
Total	100	100	100	100

a. Pensioner free voucher is only applicable to rail passengers.

b. Includes concessional fares not already categorised, for example travel passes.

Source Based on BTE surveys of bus and rail passengers (1987).

In the older age groups, patronage on both modes of transport over both corridors was more evenly distributed, with the exception of the 60 years and over group travelling on both modes of transport over the Sydney-North Coast corridor. In the case of bus patronage this latter group made up 23 per cent of travellers and for rail 29 per cent.

Occupational status

Table 3.8 presents the distribution of the occupational status of passengers by both bus and rail transport. The table indicates that students, together with those performing household duties, made up at least 25 per cent and ranged up to 45 per cent of the patronage on both modes over both corridors during the trial. Another significant occupational category on the Sydney-North Coast corridor was retired persons and pensioners who made up 20 per cent of the bus market and 32 per cent of the rail market.

TABLE 3.6 DISTRIBUTION OF BUS AND RAIL PATRONAGE AND NEW SOUTH WALES POPULATION BY SEX

(per cent)

Sex	Bus		Rail		NSW population
	Sydney- Canberra corridor	Sydney- North Coast corridor	Sydney- Canberra corridor	Sydney- North Coast corridor	
Male	42	39	41	39	49
Female	58	60	59	60	51
Non-response	0	1	0	1	..
Total	100	100	100	100	100

.. Not applicable.

Sources Based on BTE surveys of bus and rail passengers (1987) and ABS (1986).

TABLE 3.7 DISTRIBUTION OF BUS AND RAIL PATRONAGE AND NEW SOUTH WALES POPULATION BY AGE

(per cent)

Age	Bus		Rail		NSW population
	Sydney- Canberra corridor	Sydney- North Coast corridor	Sydney- Canberra corridor	Sydney- North Coast corridor	
Under 15	5	14	8	5	23
15-19	14	16	14	12	8
20-29	34	18	21	20	17
30-39	17	10	15	9	15
40-49	11	8	16	13	12
50-59	8	10	13	11	9
60 and over	10	23	13	29	16
Non-response	1	1	0	1	..
Total	100	100	100	100	100

.. Not applicable.

Sources Based on BTE surveys of bus and rail passengers (1987) and ABS (1986).

TABLE 3.8 DISTRIBUTION OF BUS AND RAIL PATRONAGE BY OCCUPATIONAL STATUS

(per cent)

Occupation	Bus		Rail	
	Sydney- Canberra corridor	Sydney- North Coast corridor	Sydney- Canberra corridor	Sydney- North Coast corridor
Student	23	29	26	14
Household duties	8	16	15	14
Clerical work	14	6	7	5
Plant or machine operator	1	2	1	1
Salesperson	4	3	1	1
Professional/ technical	23	8	14	8
Tradesperson	3	6	5	4
Semi-professional/ technical	2	3	2	2
Labourer	1	2	3	2
Manager/ administrator	7	2	7	9
Unemployed	3	3	3	6
Retired/pensioner	8	20	16	32
Non-response	3	0	0	2
Total	100	100	100	100

Source Based on BTE surveys of bus and rail passengers (1987).

Length of stay at destination

Table 3.9 contains the distribution of bus and rail patronage by the length of stay at destination. Approximately 80 per cent of all bus and rail passengers on both corridors stayed at their destination for 14 days or less. Around 50 per cent of both bus and rail passengers on the Sydney-Canberra corridor stayed for one to three days at their destination. On the Sydney-North Coast corridor, 30 per cent of all bus and rail passengers had stop-overs at their destinations ranging from four to seven days.

TABLE 3.9 DISTRIBUTION OF BUS AND RAIL PATRONAGE BY LENGTH OF STAY AT DESTINATION

(per cent)

<i>Length of stay at destination</i>	<i>Bus</i>		<i>Rail</i>	
	<i>Sydney-Canberra corridor</i>	<i>Sydney-North Coast corridor</i>	<i>Sydney-Canberra corridor</i>	<i>Sydney-North Coast corridor</i>
1-3 days	54	31	50	20
4-7 days	18	30	21	30
8-14 days	9	19	15	29
15-28 days	3	6	4	7
1-4 months	3	3	1	4
More than 4 months	7	4	5	4
Unsure	5	5	3	5
Non-response	1	2	1	1
Total	100	100	100	100

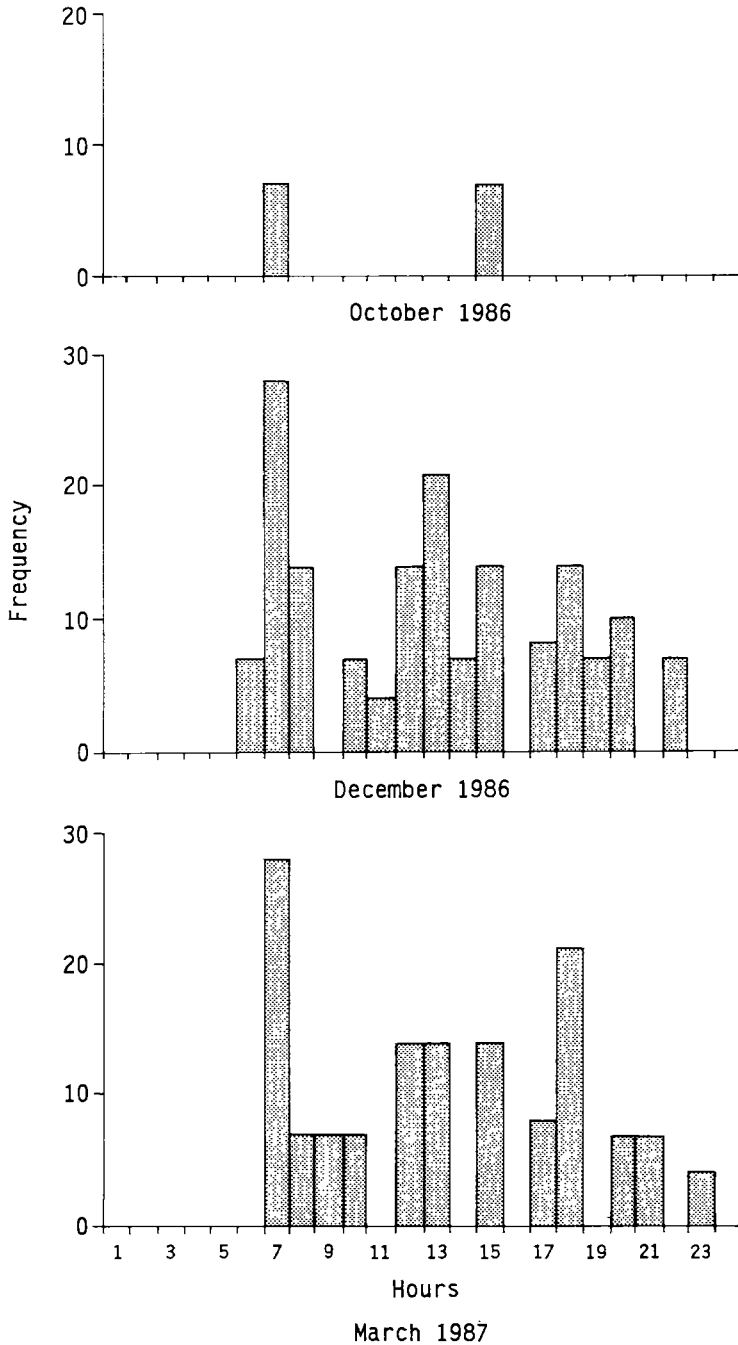
Source Based on BTE surveys of bus and rail passengers (1987).

MARKET IMPACT OF THE TRIAL

The major beneficiaries of the trial were the travelling public due to the significant improvement in bus service frequencies and reduced bus fares over both trial corridors. The trial also improved access to tourist centres particularly along the north coast of New South Wales.

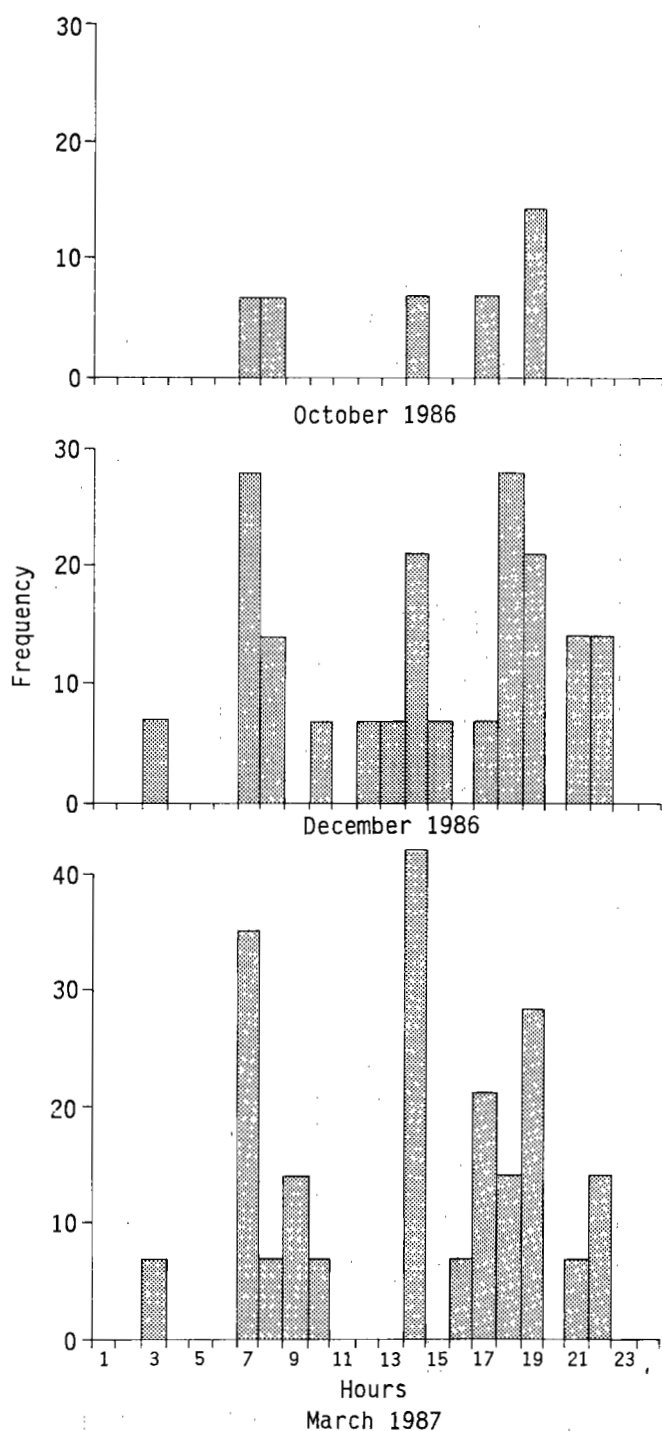
Fare reductions, increases in service as well as expanded departure and arrival times led to a significant increase in bus patronage throughout the trial. On the Sydney-Canberra corridor the increase in demand, compared with the same period 12 months earlier was 80 per cent. Similarly, on the Sydney-North Coast corridor the increase in patronage was 130 per cent.

The increase in daily bus services and the concomitant increase in arrival and departure times are illustrated in Figures 3.1 and 3.2. The increase in bus service frequencies during the trial on both corridors can be seen by comparing the December 1986 and March 1987 frequencies with those just prior to the trial, as represented by the October 1986 frequencies. The difference between the December 1986 and March 1987 frequencies reflects the changes in demand between the peak and off-peak periods respectively on both corridors.



Sources Bus proprietors (pers. comm. 1987), bus timetables.

Figure 3.1 Frequency of weekly bus services by time of day on the Sydney-Canberra corridor



Sources Bus proprietors (pers. comm. 1987), bus timetables.

Figure 3.2 Frequency of weekly bus services by time of day on the Sydney-North Coast corridor

Figures 3.3 and 3.4 show rail service frequencies on the Sydney-Canberra and Sydney-North Coast corridors respectively. Examination of these figures indicate that there were virtually no changes in rail services over both corridors throughout the six-month bus trial. Thus, it is evident that over this period the SRA did not respond in terms of service frequencies to the increased competition from the bus operators.

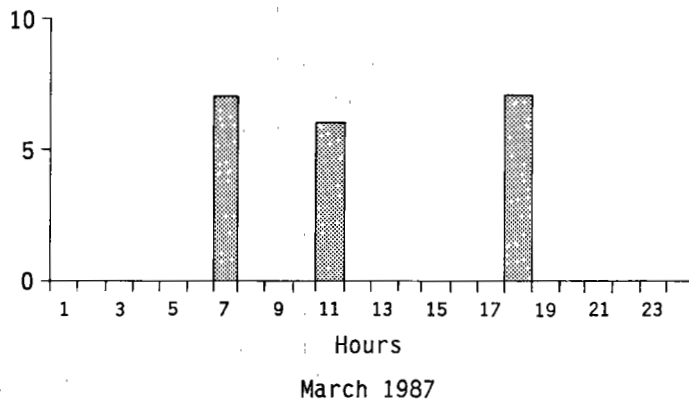
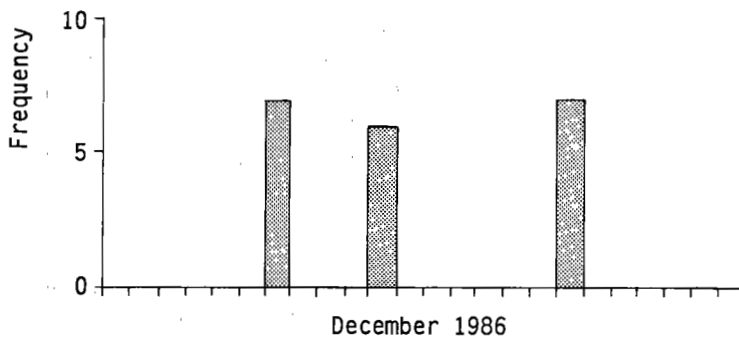
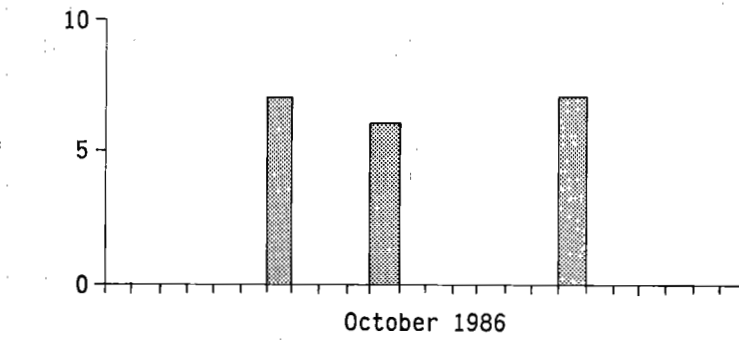
Similarly, Figures 3.5 and 3.6 illustrate the frequencies of regional air services over the respective corridors during the six-month trial period. Again, the fact there were only marginal changes to regional air services over this period suggests that airline management, similar to railway management, did not respond in terms of service frequencies to the competition from the bus services.¹

During the trial the SRA did not lower fares in an attempt to either retain or increase market shares. Also, regional airline management appear to have adopted a similar attitude in that they did not compete on price with the bus operators. The notable exception was the action by East-West Airlines on the Sydney-North Coast corridor towards the end of the trial when airfares were discounted by 40 per cent to compete with the bus services.

However, the increased competition in the public transport sector arising from trial bus services had a significant impact upon the revenues of competing modes. Both rail and air passenger services over the two corridors experienced falls in revenues approximating three-quarters of a million dollars. Table 3.10 indicates the breakdown of revenue loss by mode on each corridor for the trial period (refer to Appendix VII for details).

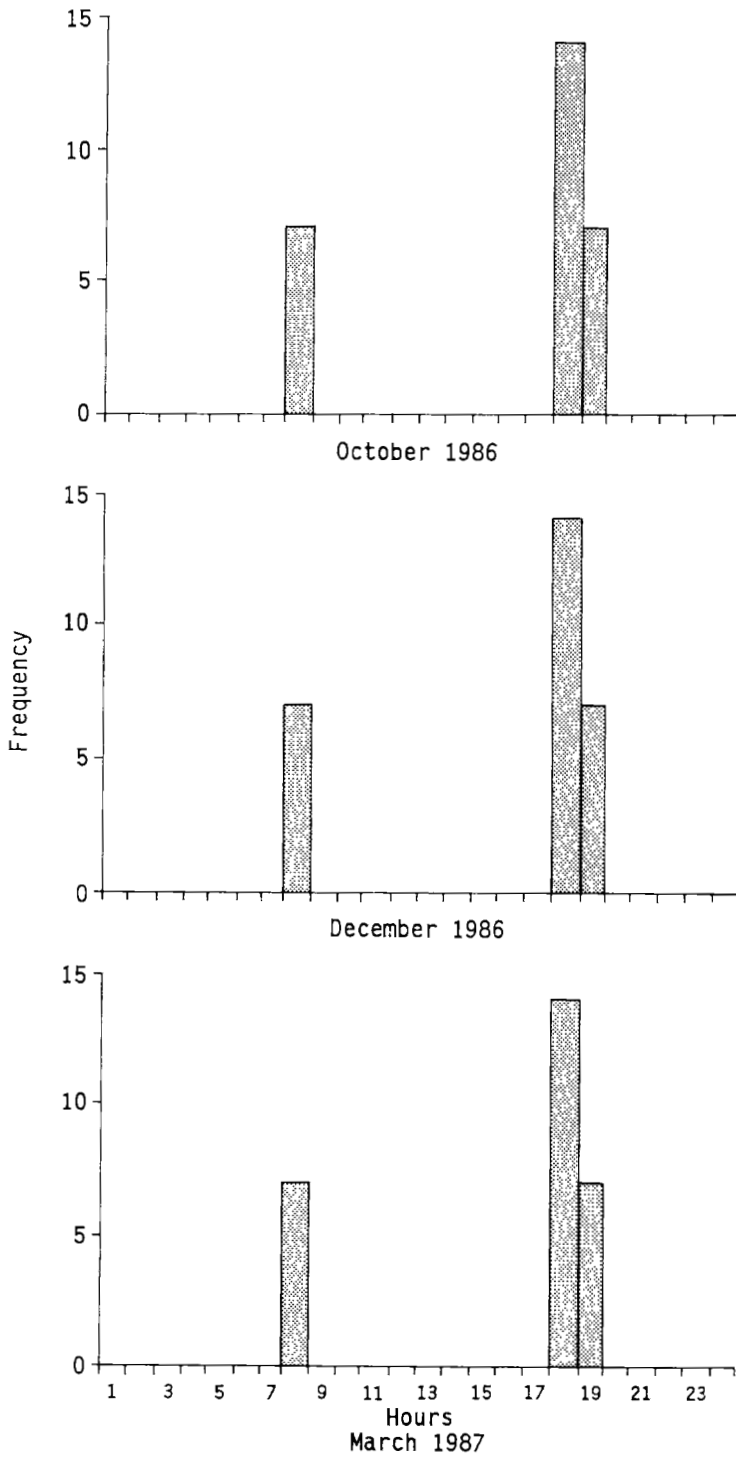
Finally, no evidence was presented to the BTE by bus operators, who were licensed to carry rail passengers to and from local rail heads in New South Wales, that the trial bus services had an adverse financial impact on their operations.

1. No analysis of trunk airline service frequencies was undertaken. On the Sydney-North Coast corridor the major airlines were not in direct competition with the bus services. On the Sydney-Canberra corridor it was considered that the major airlines catered predominantly for the business market and therefore did not compete directly with the bus companies over this corridor.



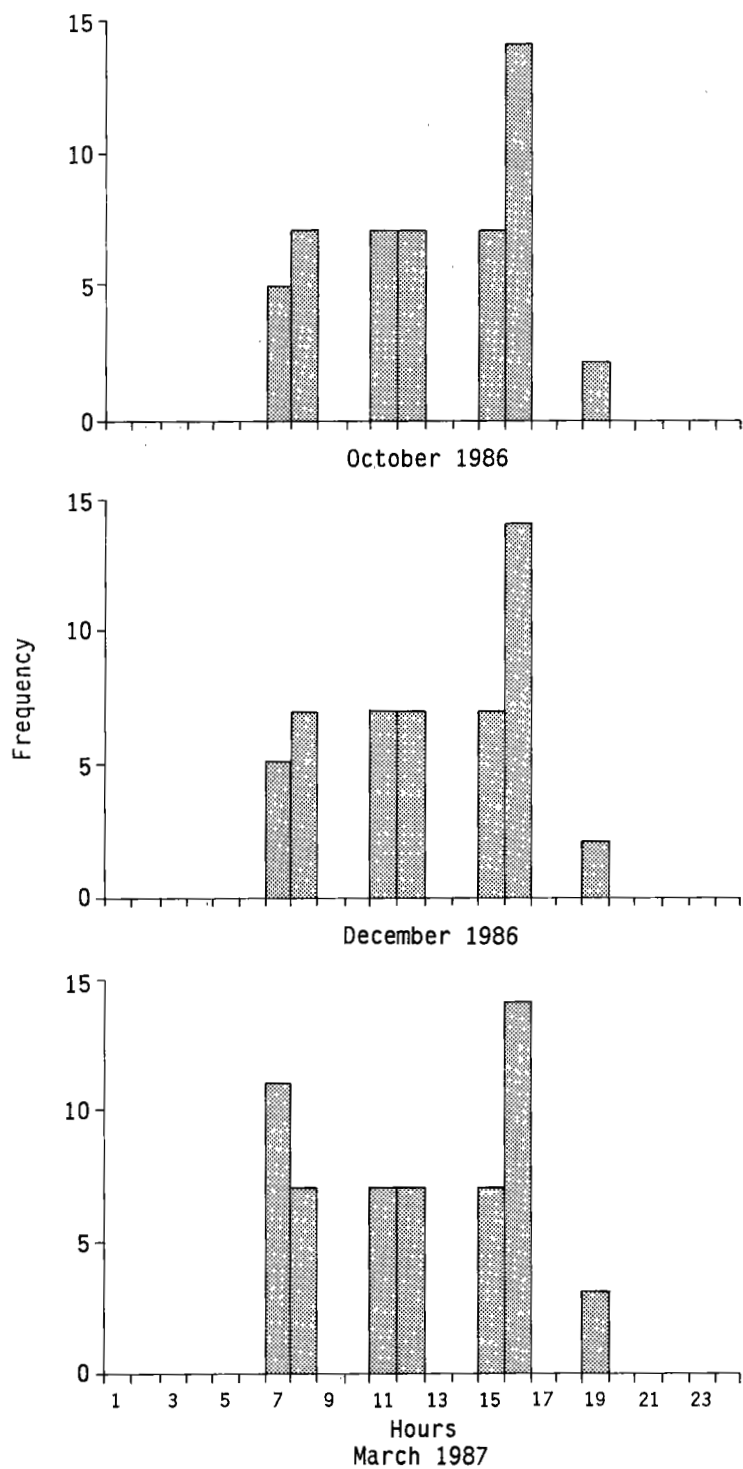
Sources SRA (pers. comm. 1987), rail timetables.

Figure 3.3 Frequency of weekly rail services by time of day on the Sydney-Canberra corridor



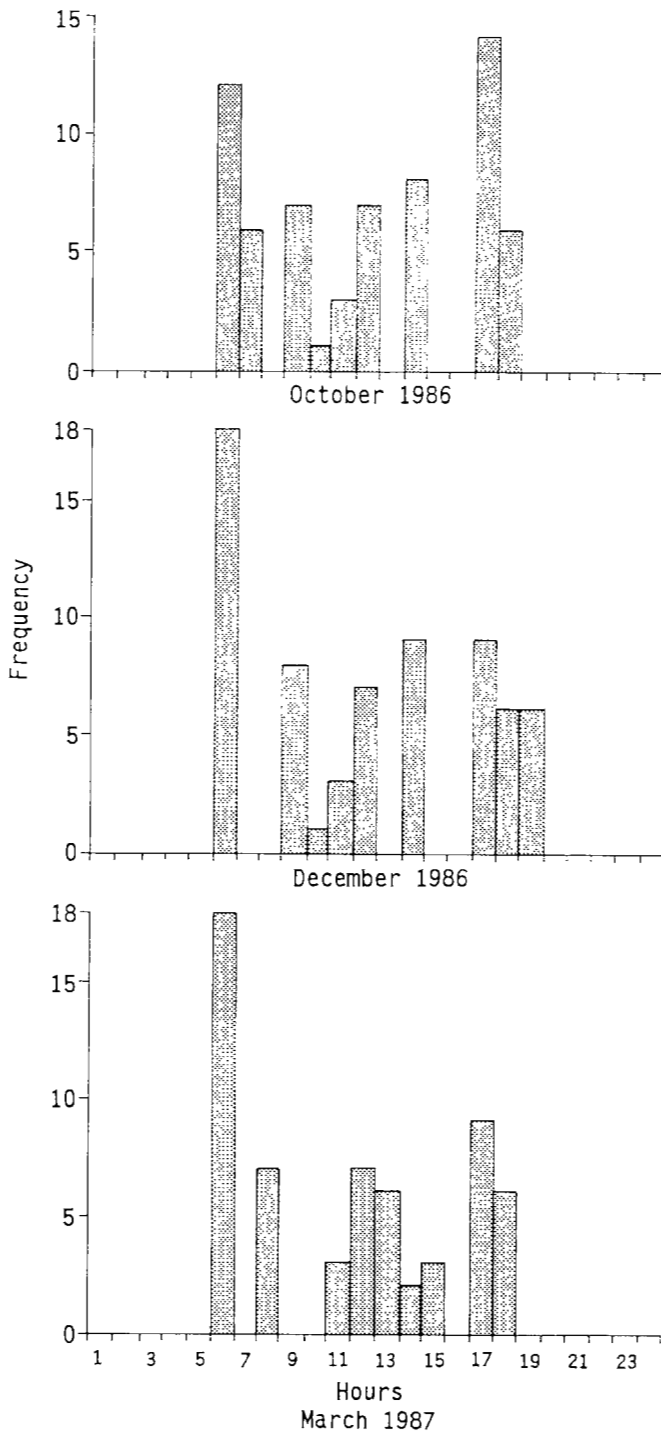
Sources SRA (pers. comm. 1987), rail timetables.

Figure 3.4 Frequency of weekly rail services by time of day on the Sydney-North Coast corridor



Sources Airline operators (pers. comm. 1987), airline timetables.

Figure 3.5 Frequency of weekly regional air services by time of day on the Sydney-Canberra corridor



Sources Airline operators (pers. comm. 1987), airline timetables.

Figure 3.6 Frequency of weekly regional air services by time of day on the Sydney-North Coast corridor

TABLE 3.10 FINANCIAL IMPACT OF TRIAL BUS SERVICES ON RAIL AND AIR
OPERATIONS, BY CORRIDOR
(\$'000)

<i>Mode of transport</i>	<i>Corridor</i>		<i>Total</i>
	<i>Sydney-Canberra</i>	<i>Sydney-North Coast</i>	
Rail	443	339	782
Air	247	498	745

Source BTE estimates.

CHAPTER 4 CONCLUDING REMARKS

This study examined the impact that the trial liberalising entry into and exit from the New South Wales long distance intrastate bus market has had upon the travelling public, bus operators, and competing modes of public transport. The trial was confined to the Sydney-Canberra and Sydney-North Coast of New South Wales corridors and was conducted over the six months to 17 May 1987.

The salient points arising out of the analysis of the trial were first, the highly competitive nature of the market for intrastate bus services over both corridors and second, the adverse financial impact that the bus services had on competing modes of public transport.

The competition between bus companies resulted in significant fare reductions on both corridors at the commencement of the trial. Furthermore, despite increases towards the end of the trial, fares were still lower than prior to the commencement of the trial.

In general neither railway nor airline management responded to either price or service competition from the bus companies during the six-month trial. This led to a significant diversion of patronage away from these services on to buses. Estimates of the number of bus passengers diverted from rail on the Sydney-Canberra corridor range from 21 000 to 31 000 and from 13 000 to 19 000 on the Sydney-North Coast corridor.

The estimated fall in rail passenger revenue from the diversion of traffic to the buses on the Sydney-Canberra corridor was \$443 000 and on the North coast corridor \$339 000. Similarly, the estimated loss in revenue to the regional airlines on the respective corridors was \$247 000 and \$498 000.

Analysis of the market structure for bus services during the trial revealed that on the Sydney-Canberra corridor, two of the four bus operators providing services dominated the market, carrying around 80 per cent of passengers between them. On the Sydney-North Coast corridor, patronage was more evenly distributed among the operators.

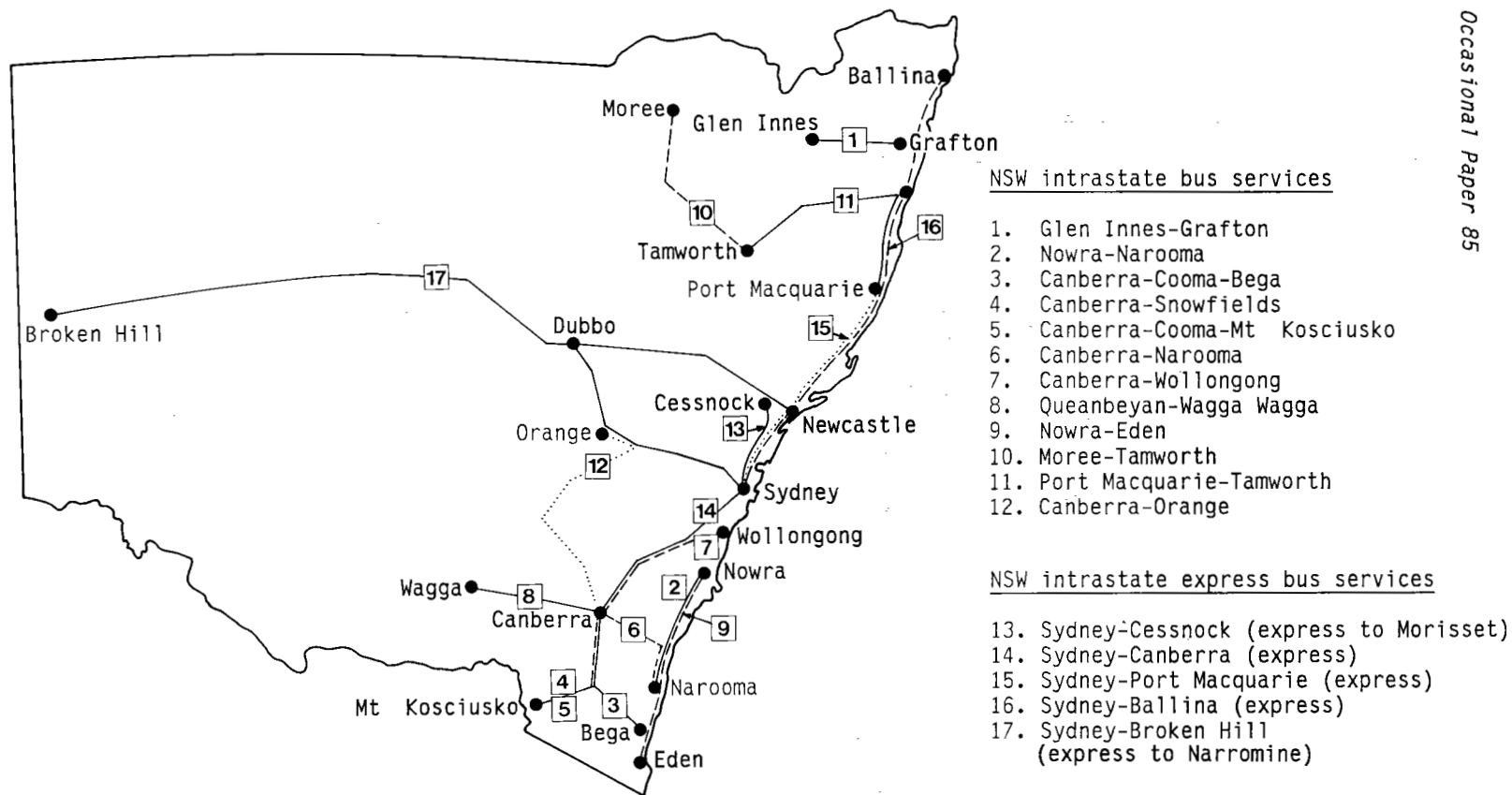
Over this corridor, eight of the original ten operators shared nearly 90 per cent of the market.

Examination of bus passenger profiles indicated that leisure, particularly travelling to visit friends and relatives, was the main reason that passengers used the intrastate bus services. In addition, on the Sydney-Canberra corridor over 70 per cent of bus passengers paid full fare for their journey compared with 45 per cent of rail passengers. In contrast, 70 per cent of rail passenger travelled under concessional fares compared with around 45 per cent of bus passengers on the North Coast corridor.

APPENDIX I NEW SOUTH WALES LONG DISTANCE INTRASTATE AND INTERSTATE BUS AND RAIL NETWORK OPERATIONS

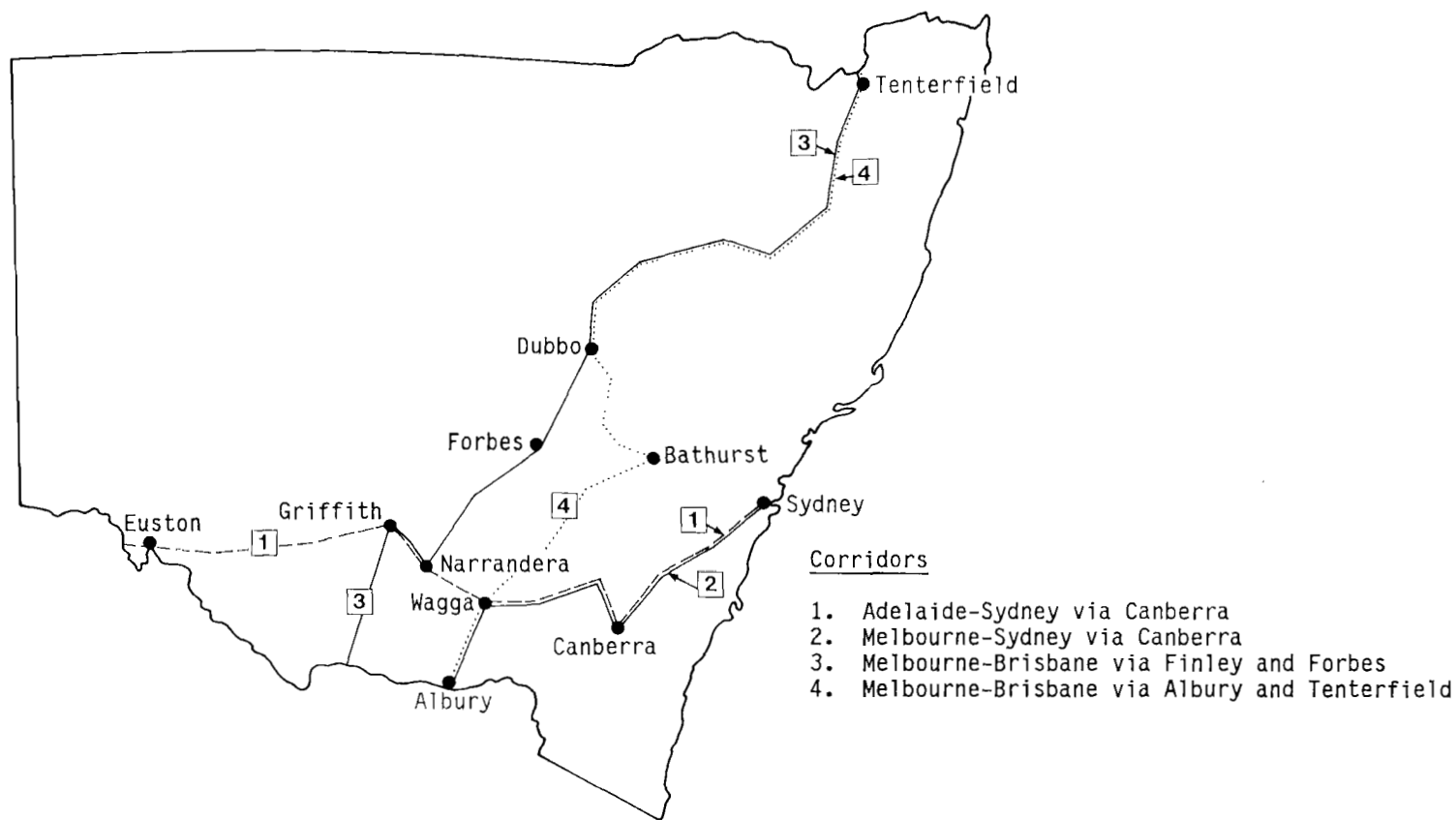
This appendix contains route details of intrastate and interstate bus and rail network operations in New South Wales prior to and during the trial extending from 17 November 1986 to 17 May 1987.

Figure I.1 shows the corridors over which licensed long distance intrastate bus services operated in New South Wales prior to the trial. Interstate bus services which had approval to pick-up and set-down intrastate passengers in New South Wales prior to and during the trial are detailed in Figures I.2 to I.4. The passenger rail services operating in New South Wales are shown in Figure I.5.



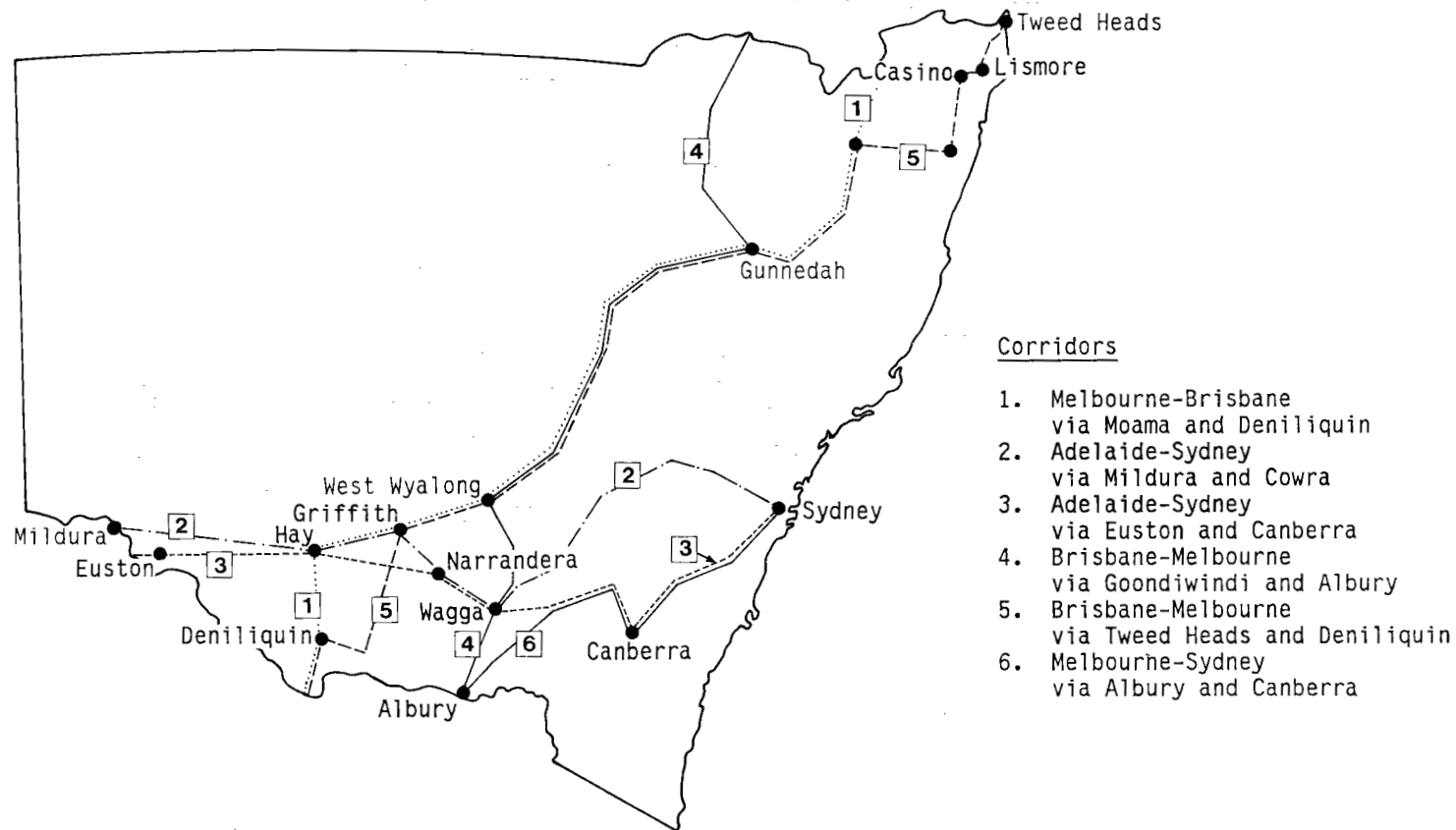
Source New South Wales Department of Motor Transport (pers. comm. 1986).

Figure I.1 Licensed long distance intrastate bus services in New South Wales, 1986



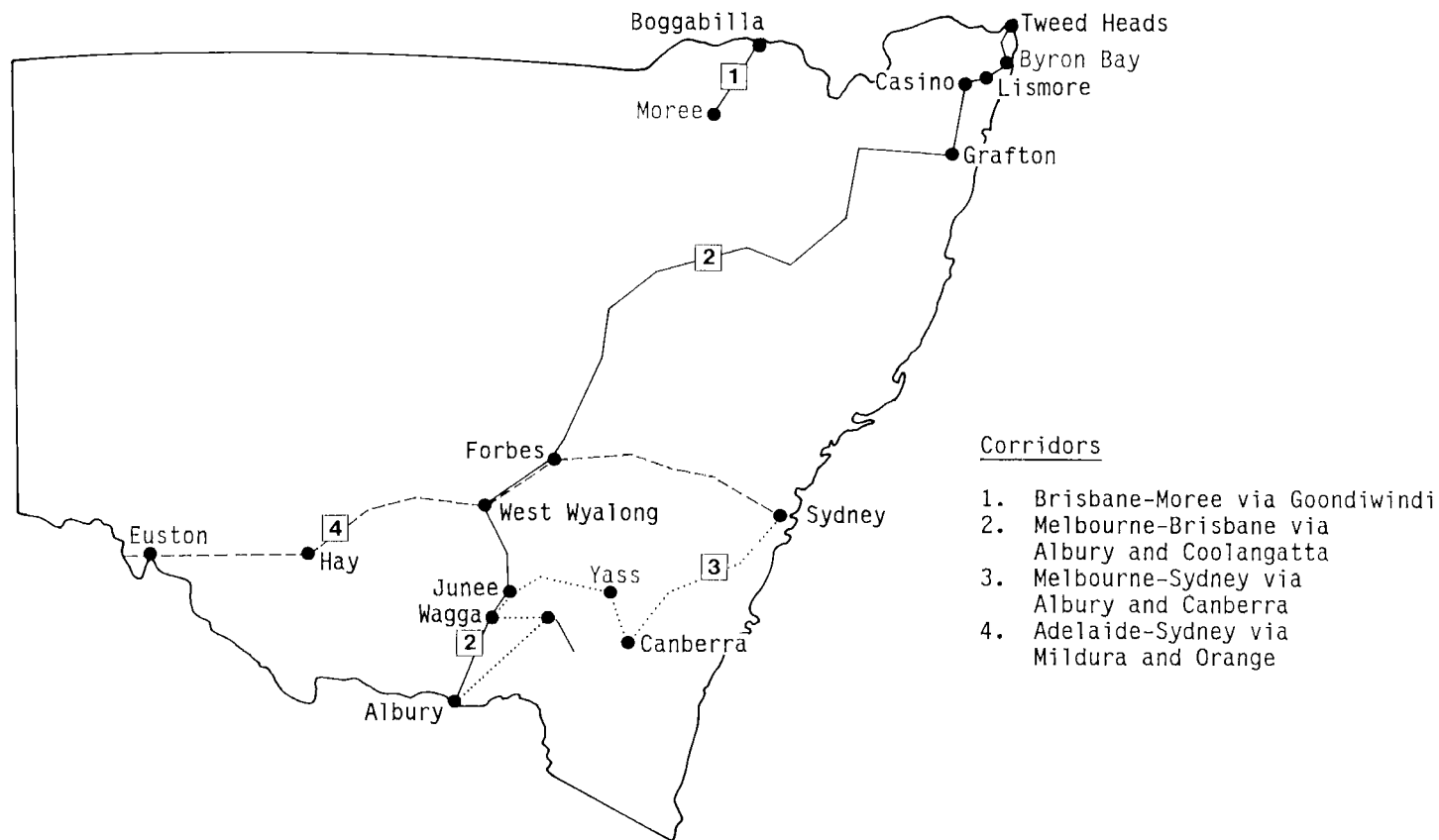
Source New South Wales Department of Motor Transport (pers. comm. 1986).

Figure I.2 Corridors over which Ansett Pioneer interstate bus services had approval to pick-up and set-down intrastate passengers in New South Wales, 1986



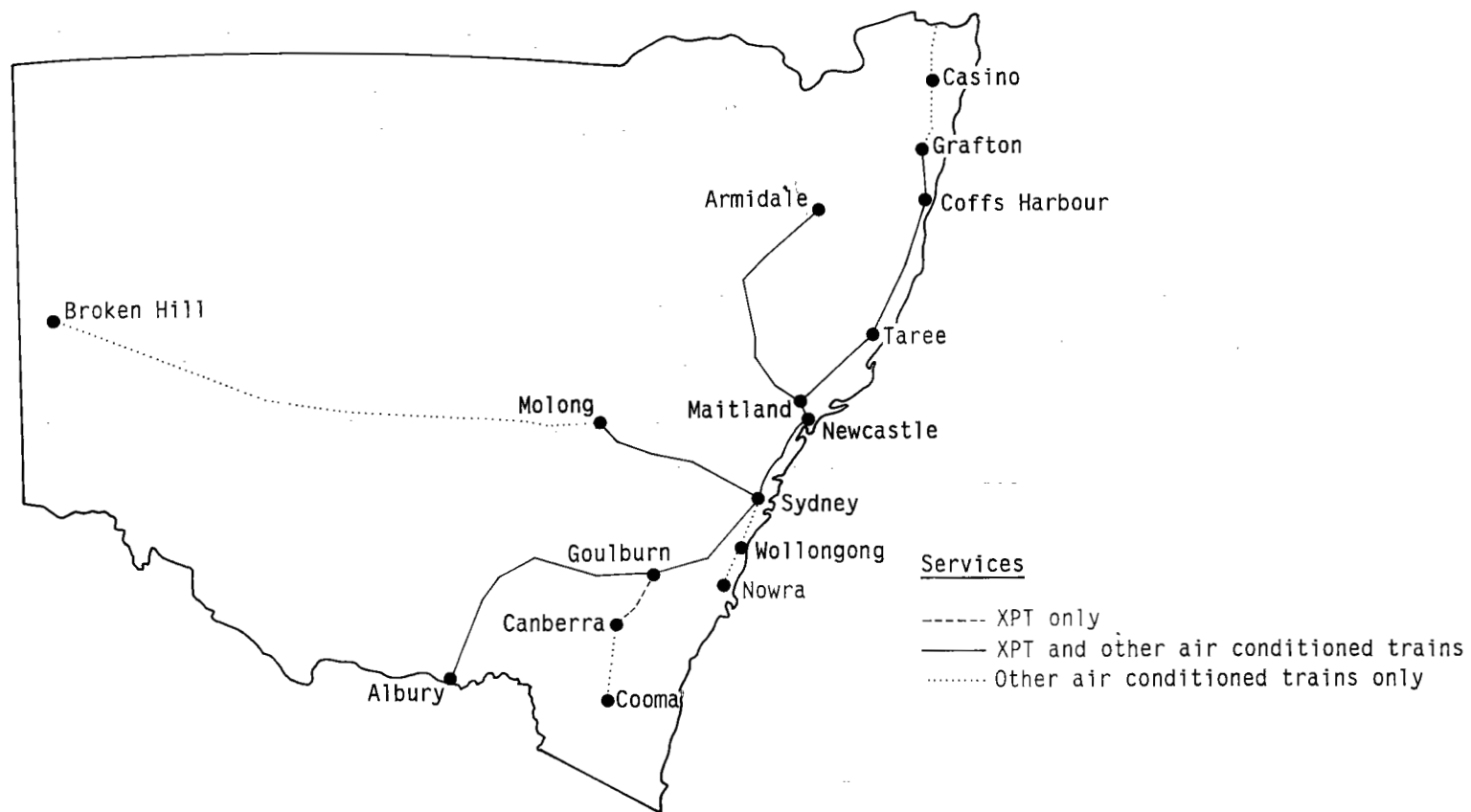
Source New South Wales Department of Motor Transport (pers. comm. 1986).

Figure I.3 Corridors over which Greyhound interstate bus services had approval to pick-up and set-down intrastate passengers in New South Wales, 1986



Source New South Wales Department of Motor Transport (pers. comm. 1986).

Figure I.4 Intrastate corridors over which interstate bus services had approval to pick-up and set-down passengers in New South Wales, 1986



Source New South Wales Department of Motor Transport (pers. comm. 1986).

Figure I.5 New South Wales rail passenger services, 1986

APPENDIX II DAILY BUS SERVICES OPERATING ON THE SYDNEY-CANBERRA AND SYDNEY-NORTH COAST NEW SOUTH WALES CORRIDORS, PRIOR TO AND DURING THE TRIAL

This appendix contains details of daily bus services operating on the Sydney-Canberra and Sydney-North Coast corridors prior to and during the trial. Tables II.1 and II.2 show the number of intrastate and interstate services offered by each operator in the month of October 1986 prior to the commencement of the trial, and the subsequent months November 1986 to May 1987 during the trial. This enables a comparison to be made of the services provided by each operator prior to and during each month of the trial. Table II.1 gives details of the Sydney-Canberra corridor, while Table II.2 gives details on the Sydney-North Coast corridor.

In addition to the services listed in Table II.2, Ansett Pioneer operated an additional service from Sydney to Canberra every Tuesday, Thursday and Sunday and two services every Friday. The company also operated an additional service every Monday, Wednesday, Thursday, Saturday and Sunday from Canberra to Sydney. Between 13 December 1986 and 31 January 1987, Greyhound operated an additional service every Monday, Thursday and Saturday in both directions over the Sydney-Canberra corridor. On the Sydney-North Coast corridor Lindsay's Coach Service provided four additional bus services during the Easter period.

TABLE II.1 DAILY^a BUS SERVICES^b ON THE SYDNEY-CANBERRA CORRIDOR: OCTOBER 1986 TO MAY 1987

Operator by route	October ^c		November		December		January		February		March		April		May	
	Intra- state	Inter- state	Intra- state	Inter- state	Intra- state	Inter- state	Intra- state	Inter- state	Intra- state	Inter- state	Intra- state	Inter- state	Intra- state	Inter- state	Intra- state	Inter- state
Canberra to Sydney																
Murrays Deluxe	..	..	3	..	3	..	3	..	3	..	3	..	3	..	3	..
Coachlines	..	3	1	2	2	2	1	2	..	3	..	3	..	3	..	3
Greyhound	..	3	3	3	3	3	3	3	3	2	2	2	2	2	2	2
Ansett Pioneer	2	3	6	3	6	3	7	3	7	3	7	3	7	3	7	3
Total	2	9	13	8	14	8	14	8	13	8	12	8	12	8	12	8

TABLE II.1 (Cont.) DAILY^a BUS SERVICES^b ON THE SYDNEY-CANBERRA CORRIDOR: OCTOBER 1986 TO MAY 1987

Operator by route	October ^c		November		December		January		February		March		April		May	
	Intra- state	Inter- state	Intra- state	Inter- state	Intra- state	Inter- state	Intra- state	Inter- state	Intra- state	Inter- state	Intra- state	Inter- state	Intra- state	Inter- state	Intra- state	Inter- state
Sydney to Canberra																
Murrays	..	..	3	..	3	..	3	..	3	..	3	..	3	..	3	..
Deluxe																
Coachlines	..	3	1	3	2	3	1	3	..	3	..	3	..	3	..	3
Greyhound	..	3	3	3	3	3	3	3	3	2	2	2	2	2	2	2
Ansett																
Pioneer	2	3	6	3	6	3	7	3	7	3	7	3	7	3	7	3
Total	2	9	13	9	14	9	14	9	13	8	12	8	12	8	12	8

a. Based on services operating 7 days per week.

b. Includes interstate bus services with rights to carry intrastate passengers.

c. Interstate services operating in October 1986 were not permitted to carry intrastate passengers.

.. Not applicable.

Sources Bus proprietors (pers. comm. 1987) and bus timetables.

[illegible]

TABLE II.2 (Cont.) DAILY^a BUS SERVICES^b ON THE SYDNEY-NORTH COAST CORRIDOR: OCTOBER 1986 TO MAY 1987

Operator	October ^c		November		December		January		February		March		April		May	
by route	Intra- state	Inter- state	Intra- state	Inter- state	Intra- state	Inter- state	Intra- state	Inter- state	Intra- state	Inter- state	Intra- state	Inter- state	Intra- state	Inter- state	Intra- state	Inter- state
Port Stephens Buses	..	..	1	..	1	..	1	..	1	..	1	..	1	..	1	..
McCafferty's	..	3	..	3	..	3	..	3	..	3	..	3	..	3	..	3
Sid Fogg & Sons	..	..	..	..	..	..	..	..	..	..	1	..	1	..	1	..
Total	5	17	9	21	7	22	7	22	5	22	5	21	5	21	5	21
South bound																
Deluxe Coachlines	..	3	2	3	2	3	2	3	..	4	..	4	..	4	..	4
Ansett Pioneer	..	3	1	4	..	4	..	4	..	4	..	3	..	3	..	3
Greyhound	..	3	..	4	..	4	..	4	..	3	..	3	..	3	..	3
Skennars Coaches ^d	4	1	3	2	3	2	3	2	3	2	3	2	3	2	3	2
Kirkland Bros. Omnibus Services	2	..	1	1	..	2	..	2	..	2	..	2	..	2	..	2

TABLE II.2 (Cont.) DAILY^a BUS SERVICES^b ON THE SYDNEY-NORTH COAST CORRIDOR: OCTOBER 1986 TO MAY 1987

Operator	October ^c		November		December		January		February		March		April		May	
by route	Intra- state	Inter- state	Intra- state	Inter- state	Intra- state	Inter- state	Intra- state	Inter- state	Intra- state	Inter- state	Intra- state	Inter- state	Intra- state	Inter- state	Intra- state	Inter- state
Lindsay's																
Coach																
Service	..	..	1	..	1	..	1	..	1	..	1	..	1	..	1	..
VIP																
Express																
Coaches	..	3	..	3	..	3	..	3	..	3	..	3	..	3	..	3
Intertour																
EET	..	1	..	1	..	1	..	1	..	1	..	1	..	1	..	1
Port																
Stephens																
Buses	..	..	1	..	1	..	1	..	1	..	1	..	1	..	1	..
McCaffertys..		3	..	3	..	3	..	3	..	3	..	3	..	3	..	3
Sid Fogg																
& Sons	..	..	..	..	..	..	..	..	..	..	1	..	1	..	1	..
Total	6	17	9	21	7	22	7	22	5	22	5	21	5	21	5	21

a. With the exception of Lindsay's, southbound services operate 7 days per week.

b. Includes interstate bus services with rights to carry intrastate passengers.

c. Interstate services operating in October 1986 were not permitted to carry intrastate passengers.

d. Skennars also operated a daily interstate service between Port Macquarie and Brisbane.

- No service was operated by the bus proprietor.

Sources Bus proprietors (pers. comm. 1987) and bus timetables.

APPENDIX III REASONS FOR DIVERTED AND GENERATED PASSENGERS ELECTING TO TRAVEL BY BUS

The reasons motivating passengers to divert from competing modes of transport and travel by bus are shown in Table III.1. Similarly, Table III.2 shows the reasons that generated new passenger traffic over the trial corridors. The tables reveal that the main reasons associated with travel by bus are convenience of departure and arrival times, convenience of pick-up and set-down points and reductions in bus fares.

TABLE III.1 DISTRIBUTION OF BUS PASSENGERS DIVERTED FROM OTHER MODES
BY REASON(S) FOR TRAVELLING BY BUS
(per cent)

Reason(s) for travelling by bus ^a	Sydney-Canberra		Sydney-North Coast	
	Peak period	Off-peak period	Peak period	Off-peak period
Convenience of departure and arrival times	36	46	38	55
Convenience of pick-up and set-down points	34	38	49	61
Comfort of buses	21	29	41	43
Quicker travel time by bus	20	25	27	27
Recent reductions in bus fares	67	67	33	45
Dislike of air travel	3	2	2	6
Dislike of train travel	9	5	21	14
Dislike of travelling in private car	10	6	7	8
No alternative transport	12	12	13	4
Scenic view	0	6	1	14
Other	2	21	2	0
Non-response	0	0	0	0

a. Columns do not add to 100 per cent because respondents were able to indicate one or more reasons for electing to travel by bus.

Source Based on BTE surveys of bus and rail passengers (1987).

TABLE III.2 DISTRIBUTION OF GENERATED BUS PASSENGERS BY REASON(S) FOR TRAVELLING BY BUS

(per cent)

Reason(s) for travelling by bus ^a	Sydney-Canberra		Sydney-North Coast	
	Peak period	Off-peak period	Peak period	Off-peak period
Convenience of departure and arrival times	35	46	39	50
Convenience of pick-up and set down-points	27	35	53	43
Comfort of buses	30	43	48	32
Quicker travel time by bus	6	16	26	29
Recent reductions in bus fares	60	41	18	25
Dislike of air travel	0	4	5	14
Dislike of train travel	12	16	19	21
Dislike of travelling in private car	2	4	16	10
No alternative transport	27	14	45	54
Scenic view	2	30	0	32
Other	2	16	2	7
Non-response	0	0	0	0

a. Columns do not add to 100 per cent because respondents were able to indicate one or more reasons for electing to travel by bus.

Source Based on BTE surveys of bus and rail passengers (1987).

APPENDIX IV BUS, RAIL AND AIR ADULT FARES FOR SYDNEY-CANBERRA AND SYDNEY-NORTH COAST NEW SOUTH WALES CORRIDORS, PRIOR TO AND DURING THE TRIAL

This appendix provides details of the fares charged by bus, rail and airline operators during the trial. Table IV.1 shows the fares charged by bus, rail and air operators by corridor at the commencement of the trial in November 1986. Table IV.2 shows the alterations to bus and air fares made in March 1987.

TABLE IV.1 ADULT PASSENGER FARES FOR BUS, RAIL AND AIR SERVICES OVER TRIAL CORRIDORS: NOVEMBER 1986
(dollars)

Operators	Sydney-North Coast corridor									
	Sydney- Canberra corridor ^a	Sydney- Newcastle	Sydney- Raymond Terrace	Sydney- Port Stephens	Sydney- Taree	Sydney- Port Macquarie ^b	Sydney- Coffs Harbour	Sydney- Grafton	Sydney- Ballina ^c	Sydney- Tweed Heads
Bus services										
Ansett Pioneer	15	..	20	..	21	23	28	30	34	38
Kirkland Bros.										
Omnibus Services	..	..	25	..	25	25	25	30	30	35
Lindsay's										
Coach Service	..	..	..	..	22	25	25	..	..	..
Greyhound	15	..	12.80	..	23.20	23.20	28.40	30.90	32.20	34.90
Murrays	15	..	..	..	..	..	..	..	..	..
Deluxe										
Coachlines	15	..	20	22	22	23	28	29	31	38
VIP Express										
Coaches	..	..	23	..	23	23	28	28	28	30
Skennars Coaches	..	..	22	..	24	25	28	30	32	35
McCafferty's	..	..	20	..	20	25	25	25	35	35
Intertour EET	..	..	15	..	20	25	30	30	35	35
Port Stephens										
Buses	..	..	..	19	..	..	..	..	..	..

TABLE IV.1 (Cont.) ADULT PASSENGER FARES FOR BUS, RAIL AND AIR SERVICES OVER TRIAL CORRIDORS: NOVEMBER 1986
(dollars)

Operators	Sydney-North Coast corridor									
	Sydney- Canberra corridor ^a	Sydney- Newcastle	Sydney- Raymond Terrace	Sydney- Port Stephens	Sydney- Taree	Sydney- Port Macquarie ^b	Sydney- Coffs Harbour	Sydney- Grafton	Sydney- Ballina ^c	Sydney- Tweed Heads
Rail services ^d										
NSW SRA	21.30	11	13.50	..	25	32	37	37.90	43.10 ^f	45.70
Air services ^d										
Air NSW	67	..	..	..	..	..	107	..	..	152
East-West Airlines ^g	67	..	..	..	84	94	..	125	..	..
Eastern-Australia Airlines	..	55	..	..	98	135	159	..	..	..
Australian Airlines	90	..	..	..	..	..	..	..	..	..
Ansett Airlines	90	..	..	..	..	..	..	..	..	..

a. Sydney-Canberra adult bus fare prior to trial was \$20.

b. Sydney-Port Macquarie adult bus fare prior to the trial was \$32.70.

c. Sydney-Ballina adult bus fare prior to the trial was \$39.

d. Economy fares only.

f. Passengers changed from rail to road coach at Grafton or Casino for travel to Ballina.

g. During the latter part of the trial, East-West Airlines offered a 40 per cent discount to air travellers on the Sydney-North Coast corridor only.

.. Not applicable.

Sources Bus, rail and airline operators (pers. comm. 1986).

TABLE IV.2 ADULT PASSENGER FARES FOR BUS, RAIL AND AIR SERVICES OVER TRIAL CORRIDORS: MARCH 1987
(dollars)

Operators	Sydney-North Coast corridor									
	Sydney- Canberra corridor ^a	Sydney- Newcastle	Sydney- Raymond Terrace	Sydney- Port Stephens	Sydney- Taree	Sydney- Port Macquarie ^b	Sydney- Coffs Harbour	Sydney- Grafton	Sydney- Ballina ^c	Sydney- Tweed Heads
Bus services										
Ansett Pioneer	18	..	20	..	24	25	30	32	41	41
Kirkland Bros.										
Omnibus Services	..	..	20	..	25	25	30	30	35	35
Lindsay's										
Coach Service	..	..	..	..	19	19	25	..	..	..
Greyhound	18	..	12.80	..	26.80	26.80	32.80	35.80	27.20	45.90
Murrays	17	..	..	..	..	..	..	..	..	..
Deluxe										
Coachlines ^d	18	..	20	..	25	25	30	32	34	40
VIP Express										
Coaches	..	..	23	..	23	23	25	28	28	30
Skennars Coaches	..	..	22	..	24	25	28	30	32	35
McCafferty's	..	..	15	..	23	23	30	33	35	38
Intertour EET	..	..	15	..	20	25	30	30	35	35
Port Stephens										
Buses	..	..	..	19	..	..	..	..	..	..
Sid Fogg										
& Sons	..	..	18	..	..	..	..	..	..	..

TABLE IV.2 (Cont.) ADULT PASSENGER FARES FOR BUS, RAIL AND AIR SERVICES OVER TRIAL CORRIDORS: MARCH 1987
(dollars)

Operators	Sydney-North Coast corridor									
	Sydney- Canberra corridor ^a	Sydney- Newcastle	Sydney- Raymond Terrace	Sydney- Port Stephens	Sydney- Taree	Sydney- Port Macquarie ^b	Sydney- Coffs Harbour	Sydney- Grafton	Sydney- Ballina ^c	Sydney- Tweed Heads
Rail services ^f										
NSW SRA	21.30	11	13.50	..	25	32	37	37.90	43.10 ^g	45.70
Air services ^f										
Air NSW	67	..	..	..	..	..	107	..	..	152
East-West Airlines ^h	67	..	..	..	86	96	..	128	..	..
Eastern-Australia Airlines	..	55	..	..	98	135	159	..	..	..
Australian Airlines	90	..	..	..	..	..	..	..	..	..
Ansett Airlines	90	..	..	..	..	..	..	..	..	..

a. Sydney-Canberra adult bus fare prior to trial was \$20.

b. Sydney-Port Macquarie adult bus fare prior to trial was \$32.70.

c. Sydney-Ballina adult bus fare prior to the trial was \$39.

d. Withdrew service in February 1987.

f. Economy fares only.

g. Passengers change from rail to road coach at Grafton or Casino for travel to Ballina.

h. During the latter part of the trial East-West Airlines offered a 40 per cent discount to air travellers on the Sydney-North Coast corridor only.

.. Not applicable.

Source Bus, rail and airline operators (pers. comm. 1987).

APPENDIX V PEAK AND OFF-PEAK SURVEY DESIGN

An outline of the methodology used in designing the peak and off-peak bus and rail surveys conducted during the trial is presented in this Appendix, together with copies of the bus and rail questionnaires.

BUS AND RAIL PASSENGER SURVEYS

Two surveys of bus and rail passengers were conducted by the BTE during the trial. The first survey was conducted during the peak period 14 to 21 January 1987, and the second survey during the off-peak period 2 to 8 April 1987.

The aims of the bus survey were to identify the proportions of diverted and generated traffic and to construct a profile of bus passenger characteristics. The aim of the rail survey was to construct a profile of rail passenger characteristics for comparison with a similar profile of bus travellers.

The survey sample frame consisted of bus operators who were granted permits by the New South Wales Department of Motor Transport to convey passengers over the trial corridors and who had begun trial operations on or after 17 November 1986 (see Table V.1).

The sample size for the peak and off-peak period bus surveys was based on the arbitrary assumption that 10 per cent of the bus passengers using the trial services diverted from other modes of transport. Based on a level of significance of 90 per cent, the sample size 'n' was calculated¹ as follows:

-
1. The formula for the sample size 'n', was derived from the per cent standard error of a proportion:

$$\%SE(\hat{P}) = 100 \sqrt{\frac{(1-P)}{Pn}}$$

n = sample size

P = proportion of diverted traffic

%SE(\hat{P}) = per cent standard error of the proportion.

TABLE V.1 INTRASTATE AND INTERSTATE BUS SERVICES SURVEYED OVER TRIAL
CORRIDORS: 14 TO 21 JANUARY 1987 AND 2 TO 8 APRIL 1987

Operators	Sydney-Canberra		Sydney-North Coast	
	Intrastate	Interstate	Intrastate	Interstate
14-21 January 1987				
Deluxe Coachlines	1	1	2	4
Ansett Pioneer	3	2	a	1
Greyhound	5	a	a	a
Murrays	4	a	..	..
Lindsay's Coach Service	..	..	1	a
Kirkland Bros.				
Omnibus Services	..	..	a	1
Skennars Coaches	..	..	4	1
VIP Express Coaches	..	..	a	2
Intertour EET	..	..	a	1
McCafferty's	..	..	a	1
Port Stephens Buses	..	..	3	a
2-8 April 1987				
Deluxe Coachlines	a	1	a	a
Ansett Pioneer	5	a	a	a
Greyhound	5	1	a	a
Murrays	4	..	..	..
Lindsay's Coach Services	..	..	2	a
Kirkland Bros.				
Omnibus Services	..	..	a	1
Skennars Coaches	..	..	4	a
VIP Express Coaches	..	..	a	1
Intertour EET	..	..	a	1
McCafferty's	..	..	a	1
Port Stephens Buses	..	..	4	a
Sid Fogg & Sons	..	..	1	..

a. Not surveyed.

.. Not applicable.

Source BTE survey methodology.

$$n = \frac{(1-P)10^4}{P(\%SE)^2}$$

where

n = sample size

P = proportion of diverted traffic

%SE = per cent standard error.

Based on the above assumption, the required sample size for both the peak and off-peak surveys was 900.

During the peak period survey 920 questionnaires were returned, of which 903 were suitable for use in the statistical analysis. However, in the off-peak survey 630 questionnaires were returned, of which only 623 were suitable for analysis. The off-peak bus survey did not reach the required sample of 900 because of lower than anticipated bus patronage levels and because of the limited resources available to the BTE to undertake the field work.

Nevertheless, because a significantly higher number of passengers diverted from competing modes of transport than was anticipated, it was possible to calculate the 95 per cent confidence intervals for both diverted and generated passengers.

The sample frame for rail passengers consisted of the rail services that competed directly with bus services over the two trial corridors (see Table V.2).

A similar sample size was adopted for both peak and off-peak rail surveys. During the peak period survey 830 rail questionnaires were returned, of which 814 were suitable for analysis. In the off-peak survey only 535 questionnaires were returned, of which 529 were suitable for analysis.

BUS AND RAIL SURVEY QUESTIONNAIRES

The aims of the peak and off-peak surveys were to:

- . construct a profile of the characteristics of bus and rail passengers;
- . identify those bus passengers who were diverted from other modes of transport; and
- . identify generated passenger traffic, that is, those persons who would otherwise not have travelled, and/or existing travellers making additional trips.

TABLE V.2 INTRASTATE RAIL SERVICES SURVEYED OVER
TRIAL CORRIDORS: 14 TO 21 JANUARY 1987
AND 2 TO 8 APRIL 1987

<i>Rail services</i>	<i>Sydney- Canberra</i>	<i>Sydney- North Coast</i>
14-21 January 1987		
Canberra XPT	2	..
Canberra Express	2	..
Gold Coast Motorail		
Express	..	2
Holiday Coast Express	..	2
2-8 April 1987		
Canberra XPT	1	..
Canberra Express	1	..
Gold Coast Motorail		
Express	..	1
Holiday Coast Express	..	1

a. The Canberra Monaro Express and the Overnight Express to Grafton were excluded from the peak and off-peak rail surveys due to limited resources available to the BTE.

.. Not applicable.

Source BTE survey methodology.

Bus and rail questionnaire forms were formally pilot tested to ensure that respondents would have no difficulty in accurately completing them.

BUS PASSENGER QUESTIONNAIRE

This survey is part of a research project being conducted by the Bureau of Transport Economics (BTE) to assist the review of long-distance passenger transport services being undertaken by the New South Wales Department of Motor Transport.

The BTE is a Federal Government research body which undertakes independent studies to assist the formulation of policy relating to all modes of transport.

Would you please complete this questionnaire and hand it to the BTE officer before disembarking.

(Please tick one box for each question, unless otherwise stated)

office
use only
1-4

Questionnaire form number

--	--	--	--

Question 1 Have you ever travelled by bus before?

1 ☐ Yes

2 ☐ No

5
☐

Question 2 How did you learn of this service?

1 ☐ Advertising

2 ☐ Word of mouth

3 ☐ Media reports

4 ☐ Other - please specify

.....

6
☐

Question 3 What is your fare type?

1 ☐ Adult

2 ☐ Pensioner concession

3 ☐ Student/child concession

4 ☐ Travel pass

5 ☐ Unemployed concession

6 ☐ Other - please specify

.....

7
☐

Question 4 Is this bus ride part of a longer journey?

1 ☐ Yes

2 ☐ No

8
☐

If 'Yes', please indicate the origin and destination of the longer journey

Origin

9-12

--	--	--	--

Destination

13-16

--	--	--	--

office
use only

Question 5 What main reason(s) are you presently travelling by bus rather than another form of transport?
(you may tick more than one box)

- ☐ Convenience of departure and arrival times
- ☐ Convenience of bus pick-up and set-down points
- ☒ Comfort of buses
- ☒ Quicker travel time by bus
- ☐ Recent reductions in bus fares
- ☐ Dislike air travel
- ☐ Dislike train travel
- ☐ Dislike travelling in car
- ☐ No alternative transport
- ☐ Scenic view
- ☒ Other - please specify
-

17-27

☐☐☐☐☐☐☐☐☐☐☐

Question 6 Where did you board this bus?.....

28-31

☐☐☐☐

Question 7 Where do you intend to get off this bus?.....

32-35

☐☐☐☐

Question 8 If bus travel was not available would you still have made this trip?

- 1 ☐ Yes 2 ☐ No

36

☐

If 'Yes', please state what alternative form of transport you would have used

37

☐

Question 9 What is the main purpose of your journey?
(you may tick more than one box)

- 1 ☒ To or from holiday
- 2 ☐ To or from visiting friends or relatives
- 3 ☐ To or from business/work
- 4 ☐ To or from personal business
- 5 ☐ Other - please specify

38-42

☐☐☐☐☐

office
use only**Question 10** How long did you or will you stay at your destination?

- 1 ☐ 1-3 days 2 ☐ 4-7 days
 3 ☐ 8-14 days 4 ☐ 15-28 days
 5 ☐ 1-2 months 6 ☐ 3-4 months
 7 ☐ more than 4 months 8 ☐ unsure

43
☐**Question 11** Have you made this journey in the last two years?

- 1 ☐ Yes 2 ☐ No

44
☐

If 'Yes', please indicate the number of times
each form of transport has been used

Bus times Rail times

45-46
☐

Air times Motorcycle times

47-48
☐

Motorcar times

49-50
☐

Other - please specify

51-52
☐53-54
☐**Question 12** Are you

- 1 ☐ Male 2 ☐ Female

55
☐**Question 13** What is your age group?

- 1 ☐ Under 15 2 ☐ 15-19
 3 ☐ 20-29 4 ☐ 30-39
 5 ☐ 40-49 6 ☐ 50-59
 7 ☐ 60 and over

56
☐**Question 14** Are you travelling in a group?

- 1 ☐ Yes 2 ☐ No

57
☐

If 'Yes' how many are in your group (excluding
yourself)

58-59
☐

Family members Others

60-61
☐

office
use only

Question 15 Please state your town/city of residence
and local postcode

Town/city Local postcode

62-65

--	--	--	--

Question 16 Which category best describes your occupation?

- | | |
|--|--|
| 1 <input type="checkbox"/> Student | 2 <input type="checkbox"/> Household duties |
| 3 <input type="checkbox"/> Clerical work | 4 <input type="checkbox"/> Plant/machine operator |
| 5 <input type="checkbox"/> Salesperson | 6 <input type="checkbox"/> Professional/technical |
| 7 <input checked="" type="checkbox"/> Tradesperson | 8 <input type="checkbox"/> Semi-professional/technical |
| 9 <input type="checkbox"/> Labourer | 10 <input checked="" type="checkbox"/> Manager/administrator |
| 11 <input type="checkbox"/> Looking for work
(unemployed) | 12 <input type="checkbox"/> Retired/pensioner |

66-67

--	--

Question 17 How would you rate the following on this bus?
(please tick one box for each item)

	Excellent 1	Good 2	Fair 3	Poor 4	Very poor 5	68-74
Cleanliness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Decor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Toilet arrangements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Staff service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comfort	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Passenger safety	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reliability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Question 18 Are there any other comments you would like to make about
the bus service?

.....
.....
.....

Thank you for your co-operation.

RAIL PASSENGER QUESTIONNAIRE

This survey is part of a research project being conducted by the Bureau of Transport Economics (BTE) to assist the review of long-distance passenger transport services being undertaken by the New South Wales Department of Motor Transport.

The BTE is a Federal Government research body which undertakes independent studies to assist the formulation of policy relating to all modes of transport.

Would you please complete this questionnaire and hand it to the BTE officer before disembarking.

(Please tick one box for each question, unless otherwise stated)

office
use only
1-4

Questionnaire form number

--	--	--	--

Question 1 What is your fare type?

- 1 ☐ Adult 2 ☐ Unemployed concession
3 ☐ Student/child concession 4 ☐ Employee pass
5 ☐ Pensioner concession 6 ☐ Pensioner free voucher
7 ☐ Other - please specify

5

Question 2 Is this rail trip part of a longer journey?

- 1 ☒ Yes 2 ☐ No

6

If 'Yes', please indicate the origin and destination of the longer journey

Origin

7-10

Destination

11-14

office
use only

Question 3 What main reason(s) are you presently travelling
by rail rather than another form of transport?
(you may tick more than one box)

- ☐ Convenience of departure and arrival times
- ☐ Convenience of rail pick-up and set-down points
- ☒ Comfort of rail services
- ☒ Quicker travel time by rail
- ☐ Lower rail fares
- ☐ Dislike air travel
- ☐ Dislike bus travel
- ☐ Dislike travelling in car
- ☐ No alternative transport
- ☐ Scenic view
- ☒ Other - please specify
-

15-25

☐☐☐☐☐☐☐☐☐☐☐

Question 4 Where did you board this train?

26-29

☐☐☐☐

Question 5 Where do you intend to get off this train?

30-33

☐☐☐☐

Question 6 What is the main purpose of your journey?
(you may tick more than one box)

- 1 ☒ To or from holiday
- 2 ☐ To or from visiting friends or relatives
- 3 ☐ To or from business/work
- 4 ☐ To or from personal business
- 5 ☒ Other - please specify
-

34-38

☐☐☐☐☐

office
use only**Question 7** How long did you or will you stay at your destination?

- 1 ☐ 1-3 days 2 ☐ 4-7 days
 3 ☐ 8-14 days 4 ☐ 15-28 days
 5 ☐ 1-2 months 6 ☐ 3-4 months
 7 ☐ more than 4 months 8 ☐ unsure

39
☐**Question 8** Have you made this journey in the last two years?

- 1 ☐ Yes 2 ☐ No

40
☐

If 'Yes' please indicate the number of times
each form of transport has been used

41-42
☐☐

Bus times Rail times

43-44
☐☐

Air times Motorcycle times

45-46
☐☐

Motorcar times

47-48
☐☐

Other - please specify

49-50
☐☐**Question 9** Are you

- 1 ☐ Male 2 ☐ Female

51
☐**Question 10** What is your age group?

- 1 ☐ Under 15 2 ☐ 15-19
 3 ☐ 20-29 4 ☐ 30-39
 5 ☐ 40-49 6 ☐ 50-59
 7 ☐ 60 and over

52
☐**Question 11** Are you travelling in a group?

- 1 ☐ Yes 2 ☐ No

53
☐

If 'Yes' how many are in year group (excluding
yourself)

54-55
☐☐

Family members Others

56-57
☐☐

office
use only**Question 12** Please state your town/city of residence
and local postcode

Town/city Local postcode

58-61

--	--	--	--

Question 13 Which category best describes your occupation?

- | | |
|--|--|
| 1 <input type="checkbox"/> Student | 2 <input type="checkbox"/> Household duties |
| 3 <input type="checkbox"/> Clerical work | 4 <input type="checkbox"/> Plant/machine operator |
| 5 <input type="checkbox"/> Salesperson | 6 <input type="checkbox"/> Professional/technical |
| 7 <input type="checkbox"/> Tradesperson | 8 <input type="checkbox"/> Semi-professional/technical |
| 9 <input type="checkbox"/> Labourer | 10 <input type="checkbox"/> Manager/administrator |
| 11 <input type="checkbox"/> Looking for work
(unemployed) | 12 <input type="checkbox"/> Retired/pensioner |

62-63

--	--

Question 14 How would you rate the following on this train?
(please tick one box for each item)

	Excellent 1	Good 2	Fair 3	Poor 4	Very poor 5	64-70
Cleanliness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Decor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Toilet arrangements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Staff service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comfort	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Passenger safety	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reliability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Question 15 Are there any other comments you would like to make about the rail service?

.....

.....

.....

Thank you for your co-operation.

APPENDIX VI PROFILE CHARACTERISTICS OF INTRASTATE BUS AND RAIL PASSENGERS

This appendix tabulates the base data upon which the description of bus and rail passenger characteristics outlined in the study are based. The characteristics of passengers are documented according to mode of transport, route and peak and off-peak travel. The distribution of the profiles are presented in terms of purpose of travel, fare type, sex and age, occupational status and length of stay at destination.

TABLE VI.1 DISTRIBUTION OF SAMPLE OF BUS AND RAIL PATRONAGE BY
PURPOSE OF TRAVEL: SYDNEY-CANBERRA CORRIDOR
(Number of passengers)

Purpose of travel	Bus				Rail			
	Sydney- Canberra		Canberra- Sydney		Sydney- Canberra		Canberra- Sydney	
	Peak	Off- peak	Peak	Off- peak	Peak	Off- peak	Peak	Off- peak
Holiday	35	40	41	21	44	5	30	17
VFR ^a	57	74	75	59	54	9	39	43
Holiday and VFR	23	6	40	10	28	2	23	7
Business and VFR	4	8	6	5	3	2	3	4
Holiday, VFR and business	0	0	0	1	3	0	2	0
Holiday and business	3	0	0	1	1	0	0	1
Business	22	36	38	15	22	7	26	43
Other	0	0	0	0	0	0	0	0
Non-response	1	5	8	10	1	0	1	0
Total	145	169	208	122	156	25	124	115

a. Visiting friends and relatives.

Source Based on BTE surveys of bus and rail passengers (1987).

TABLE VI.2 DISTRIBUTION OF SAMPLE OF BUS AND RAIL PATRONAGE BY
PURPOSE OF TRAVEL: SYDNEY-NORTH COAST CORRIDOR
(Number of passengers)

Purpose of travel	Bus				Rail			
	Sydney- North Coast		North Coast -Sydney		Sydney- North Coast		North Coast -Sydney	
	Off- peak		Off- peak		Off- peak		Off- peak	
	Peak	Off- peak	Peak	Off- peak	Peak	Off- peak	Peak	Off- peak
Holiday	45	12	26	21	68	67	121	32
VFR ^a	52	28	28	50	86	64	53	85
Holiday and VFR	43	3	30	11	51	15	49	27
Business and VFR	5	3	1	1	6	7	2	2
Holiday, VFR and business	0	0	1	0	2	3	3	0
Holiday and business	3	0	0	2	2	1	1	1
Business	24	9	12	28	28	37	10	35
Other	0	0	0	0	0	0	0	0
Non-response	3	0	1	1	18	0	7	0
Total	175	55	99	114	261	194	246	182

a. Visiting friends and relatives.

Source Based on BTE surveys of bus and rail passengers (1987).

TABLE VI.3 DISTRIBUTION OF SAMPLE OF BUS AND RAIL PATRONAGE BY FARE
TYPE: SYDNEY-CANBERRA CORRIDOR
(Number of passengers)

Fare type	Bus				Rail			
	Sydney- Canberra		Canberra- Sydney		Sydney- Canberra		Canberra- Sydney	
	Peak	Off- peak	Peak	Off- peak	Peak	Off- peak	Peak	Off- peak
Full fare	106	122	138	93	64	14	53	58
Pensioner concession/ free voucher	0	6	11	7	12	2	9	11
Student/child concession	39	32	53	16	57	3	34	20
Other concessions ^a	0	8	6	5	23	6	28	26
Non-response	0	1	1	0	0	0	0	0
Total	145	169	208	122	156	25	124	115

a. Includes concessional fares not already categorised such as travel passes.

Source Based on BTE surveys of bus and rail passengers (1987).

TABLE VI.4 DISTRIBUTION OF SAMPLE OF BUS AND RAIL PATRONAGE BY FARE
TYPE: SYDNEY-NORTH COAST CORRIDOR
(Number of passengers)

Fare type	Bus				Rail			
	Sydney- North Coast		North Coast -Sydney		Sydney- North Coast		North Coast -Sydney	
	Peak	Off- peak	Peak	Off- peak	Peak	Off- peak	Peak	Off- peak
Full fare	76	29	67	69	88	54	89	33
Pensioner concession/ free voucher	24	19	8	30	40	44	31	49
Student/child concession	71	6	22	12	64	26	73	6
Other concessions ^a	1	1	1	3	69	69	53	93
Non-response	3	0	1	0	0	1	0	1
Total	175	55	99	114	261	194	246	182

a. 'Other concessions' includes concessional fares not already categorised such as travel passes.

Source Based on BTE surveys of bus and rail passengers (1987).

TABLE VI.5 DISTRIBUTION OF SAMPLE OF BUS AND RAIL PATRONAGE BY SEX:
 SYDNEY-CANBERRA CORRIDOR
 (Number of passengers)

Sex	Bus				Rail			
	Sydney- Canberra		Canberra- Sydney		Sydney- Canberra		Canberra- Sydney	
	Off- peak		Off- peak		Off- peak		Off- peak	
	Peak	Off- peak	Peak	Off- peak	Peak	Off- peak	Peak	Off- peak
Male	55	70	85	62	60	11	46	55
Female	90	99	121	60	95	14	78	60
Non-response	0	0	2	0	1	0	0	0
Total	145	169	208	122	156	25	124	115

Source Based on BTE surveys of bus and rail passengers (1987).

TABLE VI.6 DISTRIBUTION OF SAMPLE OF BUS AND RAIL PATRONAGE BY SEX:
 SYDNEY-NORTH COAST CORRIDOR
 (Number of passengers)

Sex	Bus				Rail			
	Sydney- North Coast		North Coast -Sydney		Sydney- North Coast		North Coast -Sydney	
	Off- peak		Off- peak		Off- peak		Off- peak	
	Peak	Off- peak	Peak	Off- peak	Peak	Off- peak	Peak	Off- peak
Male	78	16	41	39	126	82	76	64
Female	95	39	57	74	132	111	166	117
Non-response	2	0	1	1	3	1	4	1
Total	175	55	99	114	261	194	246	182

Source Based on BTE surveys of bus and rail passengers (1987).

TABLE VI.7 DISTRIBUTION OF SAMPLE OF BUS AND RAIL PATRONAGE BY AGE:
 SYDNEY-CANBERRA CORRIDOR
 (Number of passengers)

Age	Bus				Rail			
	Sydney- Canberra		Canberra- Sydney		Sydney- Canberra		Canberra- Sydney	
	Peak	Off- peak	Peak	Off- peak	Peak	Off- peak	Peak	Off- peak
Under 15	11	2	19	0	18	0	6	9
15-19	36	18	23	15	19	0	21	18
20-29	49	15	66	45	37	7	24	21
30-39	19	24	38	29	27	2	13	21
40-49	14	27	21	10	24	4	26	16
50-59	9	23	12	9	9	5	15	16
60 and over	7	20	27	13	21	7	19	14
Non-response	0	0	2	1	1	0	0	0
Total	145	169	208	122	156	25	124	115

Source Based on BTE surveys of bus and rail passengers (1987).

TABLE VI.8 DISTRIBUTION OF SAMPLE OF BUS AND RAIL PATRONAGE BY AGE:
 SYDNEY-NORTH COAST CORRIDOR
 (Number of passengers)

Age	Bus				Rail			
	Sydney-North Coast		North Coast-Sydney		Sydney-North Coast		North Coast-Sydney	
	Peak	Off-peak	Peak	Off-peak	Peak	Off-peak	Peak	Off-peak
Under 15	45	2	17	1	19	3	17	3
15-19	34	5	22	12	51	21	27	8
20-29	27	6	13	33	47	45	61	21
30-39	16	5	10	15	17	29	27	9
40-49	12	3	12	6	50	15	31	22
50-59	13	9	7	13	29	17	20	30
60 and over	28	25	17	33	48	64	62	88
Non-response	0	0	1	1	0	0	1	1
Total	175	55	99	114	261	194	246	182

Source Based on BTE surveys of bus and rail passengers (1987).

TABLE VI.9 DISTRIBUTION OF SAMPLE OF BUS AND RAIL PATRONAGE BY
OCCUPATION: SYDNEY-CANBERRA CORRIDOR
(Number of passengers)

Occupation	Bus				Rail			
	Sydney- Canberra		Canberra- Sydney		Sydney- Canberra		Canberra- Sydney	
	Peak	Off- peak	Peak	Off- peak	Peak	Off- peak	Peak	Off- peak
Student	44	30	57	19	49	3	35	23
Household work	7	19	18	10	25	4	17	15
Clerical work	24	21	23	24	10	0	10	8
Plant or machine operator	1	3	2	2	1	2	1	0
Salesperson	2	5	9	7	2	0	0	2
Professional/ technical	33	48	41	24	21	3	15	19
Tradesperson	5	4	7	5	8	1	8	5
Semi- professional/ technical	4	6	4	1	2	0	3	3
Labourer	0	2	4	3	7	0	2	3
Manager/ administrator	12	12	14	7	8	2	7	12
Unemployed	7	3	8	3	7	1	2	4
Retired/ pensioner	5	14	21	14	15	8	23	21
Non-response	1	2	0	3	1	1	1	0
Total	145	169	208	122	156	25	124	115

Source Based on BTE surveys of bus and rail passengers (1987).

TABLE VI.10 DISTRIBUTION OF SAMPLE OF BUS AND RAIL PATRONAGE BY
OCCUPATION: SYDNEY-NORTH COAST CORRIDOR
(Number of passengers)

Occupation	Bus				Rail			
	Sydney-North Coast		North Coast-Sydney		Sydney-North Coast		North Coast-Sydney	
	Peak	Off-peak	Peak	Off-peak	Peak	Off-peak	Peak	Off-peak
Student	77	6	35	11	48	26	45	7
Household work	27	13	12	21	40	22	24	34
Clerical work	5	1	5	16	10	9	17	4
Plant or machine operator	1	1	2	4	3	4	2	2
Salesperson	3	2	1	6	9	2	2	0
Professional/technical	15	1	10	9	25	18	28	2
Tradesperson	4	4	9	8	14	6	6	6
Semi-professional/technical	4	2	4	2	8	4	7	3
Labourer	2	0	3	3	4	4	4	3
Manager/administrator	2	0	2	3	27	10	37	3
Unemployed	8	0	3	2	18	15	8	12
Retired/pensioner	26	2	13	28	47	73	61	100
Non-response	1	2	0	1	8	1	5	6
Total	175	55	99	114	261	194	246	182

Source Based on BTE surveys of bus and rail passengers (1987).

TABLE VI.11 DISTRIBUTION OF SAMPLE OF BUS AND RAIL PATRONAGE BY
LENGTH OF STAY AT DESTINATION: SYDNEY-CANBERRA CORRIDOR
(Number of passengers)

<i>Length of stay at destination</i>	<i>Bus</i>				<i>Rail</i>			
	<i>Sydney- Canberra</i>		<i>Canberra- Sydney</i>		<i>Sydney- Canberra</i>		<i>Canberra- Sydney</i>	
	<i>Off- peak</i>		<i>Off- peak</i>		<i>Off- peak</i>		<i>Off- peak</i>	
	<i>Peak</i>	<i>Off- peak</i>	<i>Peak</i>	<i>Off- peak</i>	<i>Peak</i>	<i>Off- peak</i>	<i>Peak</i>	<i>Off- peak</i>
1-3 days	65	111	86	88	53	10	68	17
4-7 days	34	24	46	11	38	5	30	43
8-14 days	11	7	34	7	33	7	12	7
15-28 days	7	2	4	8	10	0	6	4
1-4 months	6	4	11	0	0	0	0	0
More the 4 months	16	11	11	3	16	0	2	1
Unsure	5	9	10	4	6	3	3	43
Non-response	1	1	6	1	0	0	3	0
Total	145	169	208	122	156	25	124	115

Source Based on BTE surveys of bus and rail passengers (1987).

TABLE VI.12 DISTRIBUTION OF SAMPLE OF BUS AND RAIL PATRONAGE BY LENGTH OF STAY AT DESTINATION: SYDNEY-NORTH COAST CORRIDOR

(Number of passengers)

<i>Length of stay at destination</i>	<i>Bus</i>				<i>Rail</i>			
	<i>Sydney-North Coast</i>		<i>North Coast-Sydney</i>		<i>Sydney-North Coast</i>		<i>North Coast-Sydney</i>	
	<i>Off-peak</i>		<i>Off-peak</i>		<i>Off-peak</i>		<i>Off-peak</i>	
	<i>Peak</i>	<i>Off-peak</i>	<i>Peak</i>	<i>Off-peak</i>	<i>Peak</i>	<i>Off-peak</i>	<i>Peak</i>	<i>Off-peak</i>
1-3 days	40	30	18	49	47	49	41	37
4-7 days	56	15	34	32	74	61	65	66
8-14 days	43	4	23	16	78	37	93	44
15-28 days	8	0	11	7	25	9	19	11
1-4 months	6	2	4	2	15	11	9	3
More than 4 months	9	3	3	0	7	8	7	4
Unsure	9	1	4	7	10	18	6	10
Non-response	4	0	2	1	5	1	6	7
Total	175	55	99	114	261	194	246	182

Source Based on BTE surveys of bus and rail passengers (1987).

APPENDIX VII METHODOLOGY FOR CALCULATING THE FINANCIAL IMPACT OF THE TRIAL ON COMPETING MODES OF PUBLIC TRANSPORT

This appendix outlines the methodology used in calculating the financial impact upon competing rail and air operators during the trial.

For both rail and air transport estimates of the loss in revenue were calculated as the product of diverted patronage and the respective passenger fares. On both corridors, the fares used were economy and concessional fares for both rail and regional airlines.

Basing the fall in revenues on these fares underestimates the losses to the railways as no account is taken of passengers who may have paid first class fares. Furthermore, trunk airline fares were not used in the analysis as the major airlines were not in direct competition with the bus services on either corridor.

The estimated number of passengers paying concessional fares that was used in the analysis was based on the number of bus passengers diverted from rail and air transport who stated that they paid concessional fares on the bus (refer to Table VII.1). Fares for the Sydney-Canberra corridor are contained in Table VII.2.

As the bus services on Sydney-North Coast corridor were not express services it was necessary to calculate weighted average rail and air fares. These fares were based on the origin-destination (O-D) of diverted bus patronage in the survey weighted by the number of bus passengers travelling over each O-D pair (refer to Table VII.3).

TABLE VII.1 DISTRIBUTION OF BUS FARES PAID BY PASSENGERS DIVERTED
FROM AIR AND RAIL SERVICES, BY CORRIDOR^a
(per cent)

Fare type	Sydney- Canberra		Canberra- Sydney		Sydney- North Coast		North Coast- Sydney	
	Peak	Off- peak	Peak	Off- peak	Peak	Off- peak	Peak	Off- peak
Rail passengers								
Adult	74	55	54	73	33	40	68	73
Concession	26	37	46	27	67	60	32	27
Air passengers								
Adult	100	50	73	100	43	b	100	80
Concession	b	50	18	b	57	b	b	20

a. Not all columns add to 100 per cent due to respondents providing insufficient information to determine their fare type, and non-responses.

b. There were no respondents who indicated they had diverted from air travel on these routes.

Source Based on BTE surveys of bus and rail passengers (1987).

TABLE VII.2 RAIL AND AIR FARES^a USED IN ANALYSING THE FINANCIAL
IMPACT OF THE BUS TRIAL ON COMPETING MODES OF PUBLIC
TRANSPORT: SYDNEY-CANBERRA CORRIDOR
(dollars)

Fare type	Rail		Air	
	Sydney- Canberra	Canberra- Sydney	Sydney- Canberra	Canberra- Sydney
Adult economy	21.30	21.30	67	67
Student/pensioner concession	10.65	10.65	50 ^b	50 ^b

a. Scheduled regional airline fares.

b. Concession not offered to pensioners.

Source Rail and airline fare schedules.

TABLE VII.3 WEIGHTED AVERAGE RAIL AND AIR FARES USED IN ANALYSING THE
FINANCIAL IMPACT OF THE BUS TRIAL ON COMPETING MODES OF
PUBLIC TRANSPORT: SYDNEY-NORTH COAST CORRIDOR
(dollars)

Fare type	Rail		Air	
	Sydney- North Coast	North Coast- Sydney	Sydney- North Coast	North Coast- Sydney
Peak-period				
Adult economy	30.09	28.60	145.29	80.75
Student/pensioner concession	15.05	14.30	107.00	59.76
Off-peak period				
Adult economy	17.64	30.20	a	141.60
Student/pensioner concession	8.82	15.10	a	104.78

a. There were no respondents who indicated that they had been diverted from air travel on this route.

Sources Based on BTE surveys of bus and rail passengers (1987), and rail and airline fare schedules.

BIBLIOGRAPHY

Australian Bureau of Statistics (1986), *New South Wales Yearbook*, cat. no. 1300.1, AGPS, Canberra.

Australian Standing Committee on Tourism, *Domestic Travel in Australia Statistical Reviews 1985-86*.

Bayliss D. (1987), *Deregulation or Competitive Regulation?*, keynote address to 1987 Australian Bus and Coach Conference, unpublished.

Bureau of Transport Economics (BTE) (1985), *Australian Long Distance Coach Industry Review*, Occasional Paper 74, AGPS, Canberra.

__ (1986), *Demand for Australian Domestic Aviation Services*, Occasional Paper 79, AGPS, Canberra.

Department of Aviation (1984), *Air Transport Statistics*, various years from 1983, Canberra.

Dodgson J. S., Katsoulacos Y. (1987), Working Paper No 1, *Quality Competition in Bus Services: Some Welfare Implications*, University of Liverpool.

New South Wales Parliament (1974), *Commission of Inquiry into Privately Operated Omnibus and Tourist Vehicles Servicing NSW*, (Report of Commissioner A. Curlewis), Parl. Paper 61.

Review of New South Wales Air Services (Report, J. G. Riley, Chairman) (1986), *Flying Towards 2000*, Ministry of Transport, Sydney.

Saffron, D (1986a), *Review of Intrastate Long Distance Bus Services*, unpublished.

__ (1986b), *Policy Relating to Long Distance Bus Services in New South Wales*, Paper presented to Regional Science Association Australia and New Zealand Section Eleventh Annual Conference, unpublished.

ABBREVIATIONS

ABS	Australian Bureau of Statistics
BTE	Bureau of Transport Economics
DMT	Department of Motor Transport
DofA	Department of Aviation
SRA	New South Wales State Rail Authority