

**TOURISM BENEFITS  
FROM SEALING ROADS:  
USER SURVEY OF  
MILFORD SOUND ROAD**

TRAVERS MORGAN (NZ) LTD  
Wellington, New Zealand

**Transit New Zealand Research Report No. 45**

ISBN 0-478-10502-9

ISSN 1170-9405

© 1995, Transit New Zealand  
PO Box 5084, Lambton Quay, Wellington, New Zealand  
Telephone (04) 499-6600; Facsimile (04) 496-6666

Travers Morgan (NZ) Ltd. 1995. Tourism benefits from sealing roads:  
User survey of Milford Sound road. *Transit New Zealand Research Report  
No. 45*. 33pp.

**Keywords:** bus, coach, Milford Sound, New Zealand, rental cars, roads,  
tourism, traffic trends, unsealed roads

## **AN IMPORTANT NOTE FOR THE READER**

While this report is believed to be correct at the time of publication, Transit New Zealand and its employees and agents involved in preparation and publication cannot accept any contractual, tortious or other liability for its content or for any consequences arising from its use and make no warranties or representations of any kind whatsoever in relation to any of its contents.

The report is only made available on the basis that all users of it, whether direct or indirect, must take appropriate legal or other expert advice in relation to their own circumstances and must rely solely on their own judgement and such legal or other expert advice.

*The material contained in this report is the output of research and should not be construed in any way as policy adopted by Transit New Zealand, but may form the basis of future policy.*



## **CONTENTS**

<b>EXECUTIVE SUMMARY</b>	7
<b>ABSTRACT</b>	8
<b>1. INTRODUCTION</b>	9
<b>2. TRAFFIC COUNT TRENDS</b>	11
<b>3. INTERVIEW PLANNING AND DESIGN</b>	16
<b>4. PILOT SURVEY OF SELECTED LOCAL TOURIST ORGANISATIONS</b>	17
<b>5. SURVEY OF SELECTED TOURIST OPERATORS</b>	20
<b>6. FURTHER RESEARCH</b>	23
<b>7. SUMMARY AND CONCLUSIONS</b>	25
<b>APPENDICES</b>	
<b>1. TRAFFIC COUNT DATA FOR TOURIST ROUTES</b>	27
<b>2. TOURISM INDUSTRY CONTACTS USED FOR SURVEYS</b>	29
<b>3. CHECK LISTS USED IN SURVEY INTERVIEWS</b>	31



## EXECUTIVE SUMMARY

### 1. The Project

This report is of a research project carried out in 1993 to investigate the benefits from sealing roads on the level of tourism activity and on gross tourism expenditure in New Zealand. The effects of sealing the Milford Sound road was used as a case study.

### 2. Methodology

The project involved a study of traffic flows into Milford Sound, Queenstown and West Coast, South Island, New Zealand, to determine any discernible trends in tourist activity. A pilot survey of selected local tourist organisations was undertaken, followed by a survey of selected tourist operators.

### 3. Key Findings

Traffic growth on the Milford Sound road, as recorded by traffic counts and international visitor survey data (from the period 1974–1993), has shown a steady increase but with no evidence of any change in that trend since the road was sealed. Some evidence of an increase is shown in seasonality, associated with the overall increase in tourist numbers to the South Island.

Interviews held with staff of local tourist organisations in Te Anau identified the main effect of the sealing to be a shift in independent travellers from using bus to car. Otherwise sealing was not considered to have affected the number of visitors to Milford Sound.

The interviews with tour operators elicited a similar response. Sealing the Milford Sound road has made the journey faster, more comfortable and safer, but respondents did not think the total number of tourists to New Zealand would be affected, and they were divided as to its impact on tourism expenditure in New Zealand.

### 4. Conclusion

The effects of sealing the Milford Sound road improved the travel experience for tourists, effects which could be expected to lead to an increase in tourist numbers and hence tourist expenditure in New Zealand. However it was not possible to isolate these effects from those of other factors affecting tourist numbers and expenditure. Further research (as originally envisaged) would also not be productive or cost-effective, and in consequence the study was terminated.

## **ABSTRACT**

The benefits from sealing roads on the level of tourism activity and on gross tourism expenditure in New Zealand using, as a case study, the effects of sealing the Milford Sound road are reported.

The research, carried out in 1993, involved interviews with tourist organisations in Te Anau and with tour operators who operate into Milford Sound.

Some changes in tourist activity as a result of the road sealing have been identified, but changes to tourism expenditure or tourist numbers are not confirmed.



# 1. INTRODUCTION

## 1.1 This Report

This report is of a research project that investigated, in 1993, the benefits from sealing roads on the level of tourism activity and on gross tourism expenditure in New Zealand. It also assessed the likely magnitude of the benefits. The reason for the research was the belief that international tourists are more likely to visit New Zealand, and to stay longer in the country, if the roads in key tourist areas are sealed.

As a case study, this project used the Milford Sound road (Figure 1.1) on which sealing had been completed in February 1992.

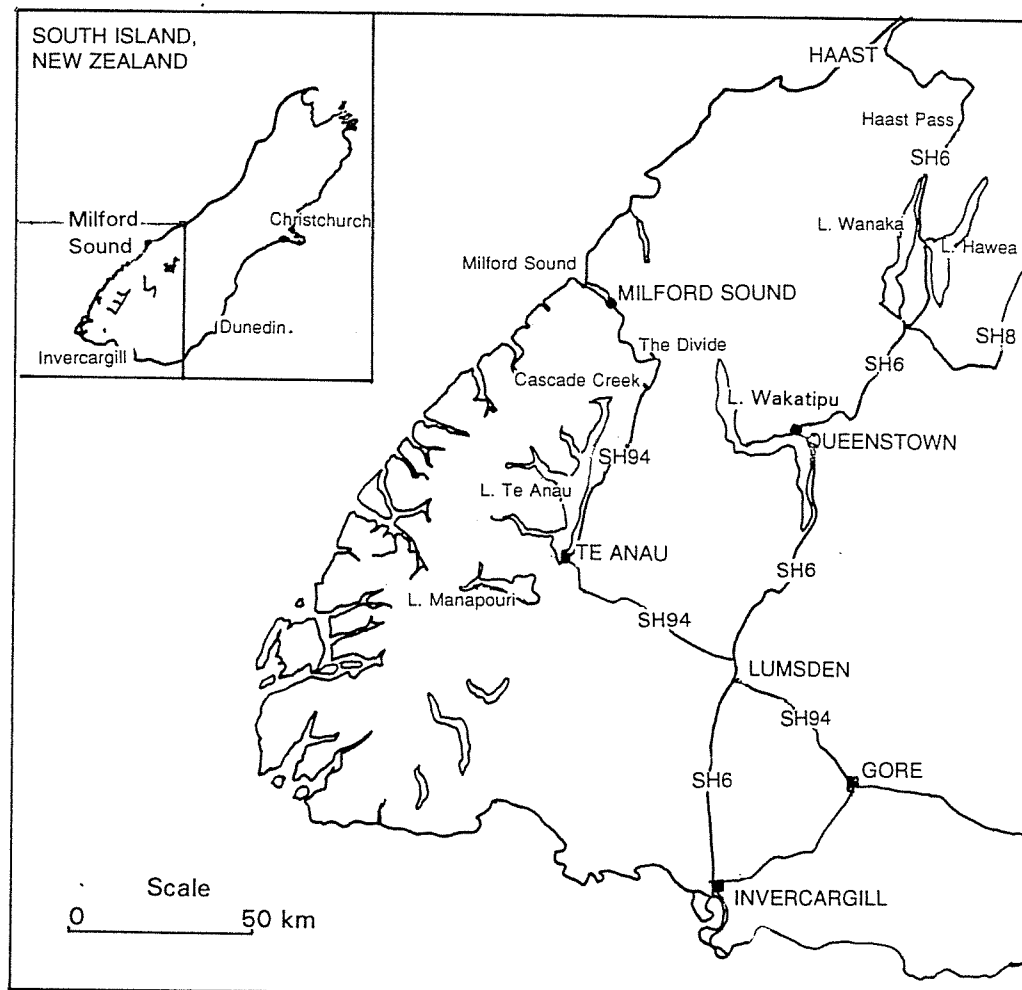


Figure 1.1 Location of Milford Sound road, and the study area.

## 1.2 Project Objectives and Scope

The overall objectives of the project were:

- *To ascertain the importance of improving the New Zealand road system, specifically through sealing of unsealed roads, in influencing the level of tourist activity in New Zealand; and*
- *To assess the likely effects of sealing the Milford Sound road (as a specific case study) on the level of tourism activity and on gross tourism expenditure in New Zealand.*

The project investigated the impacts of roading improvements on net tourism activity in New Zealand. Roding improvements may influence:

- more foreign tourists to visit New Zealand;
- foreign tourists to stay longer in New Zealand; and
- New Zealand residents to holiday more in New Zealand than overseas.

Additional tourist traffic on the Milford Sound road resulting from sealing the route was likely to have been primarily diverted from other routes, areas and tourist activities, rather than represent additional tourist activity in New Zealand.

The project was originally envisaged as consisting of two principal stages:

- Stage 1 - an exploratory stage, involving initial research on the range of topics identified as necessary to meet the project objectives, without undertaking extensive work on any one topic. The Stage 1 report was to define the most cost-effective way of proceeding with more detailed studies in Stage 2.
- Stage 2 - more detailed research on particular topics, depending on the outcome of Stage 1. However because of the results obtained in Stage 1, the project was terminated and Stage 2 was not undertaken.

## 1.3 Research Tasks and Report Structure

Stage 1 involved six tasks. This report presents a summary of findings and more detailed descriptions of the work undertaken for each task, and is structured as shown in Table 1.1.

Table 1.1 Research tasks and report structure.

Stage 1 Tasks	Report Section	Report Appendix
1. Traffic Count Trends	2	1
2. Interview Planning and Design	3	2, 3
3. Pilot Survey of Selected Local Tourist Organisations	4	
4. Survey of Selected Tourist Operators	5	
5. Further Research	6	
6. Stage 1 Report		

## 2. TRAFFIC COUNT TRENDS

### 2.1 Objective

The objective of Task 1 was to:

*Analyse traffic counts on the Milford Sound road (Cascade Creek control station, monthly counts) and compare trends over the last 10 years (availability permitting) with those elsewhere in Otago/Southland/West Coast tourist areas (e.g. Haast, Mt Cook). The analysis is to be in terms of seasonality and monthly periods.*

### 2.2 Traffic Count Analysis

#### 2.2.1 Method

Traffic count data for the years 1975–1992 were analysed for several points on State Highways SH6 (Blenheim-Westport-Haast-Invercargill), SH8 (Timaru-Tekapo-Lindis Pass-Tarras), and SH94 (Gore-Lumsden-Te Anau-Milford Sound).

Monthly data for the years 1985–1992 obtained at Cascade Creek (SH94) (Appendix 1, Table A1.2) and Haast Pass (SH6) were analysed. Estimates of counts were made for The Divide (on SH94), about 15 km east of the Homer Tunnel. These traffic count data are shown in Figure 2.1, based on the data supplied in Appendix 1. Data for 1993 were incomplete when this report was being compiled and have been excluded.

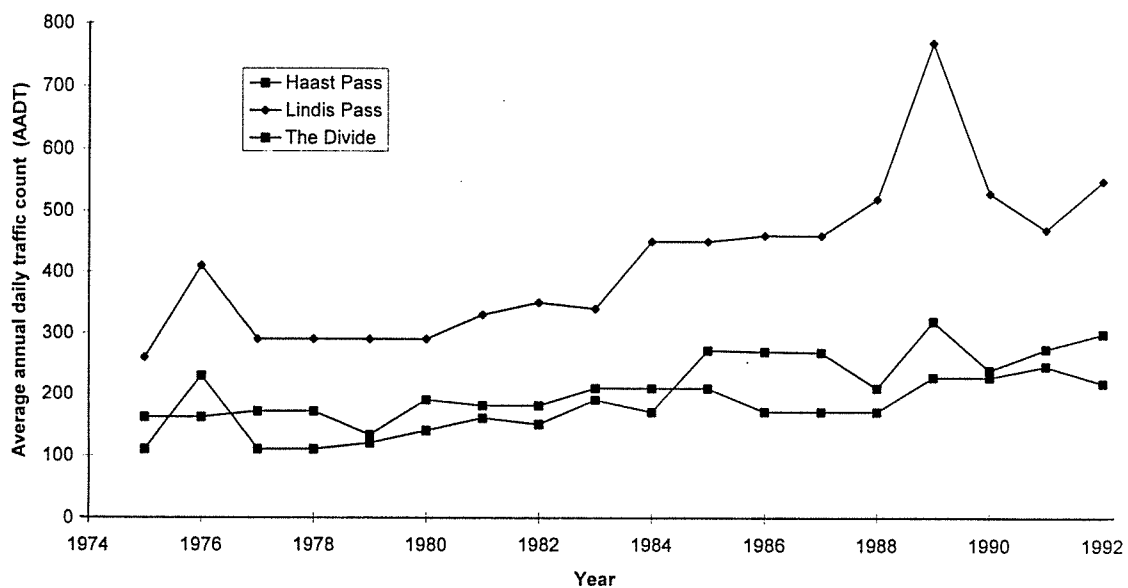


Figure 2.1 Average daily traffic flow for the years 1974–1992, obtained from counters positioned at Haast Pass (SH6), at Lindis Pass (SH8), and at The Divide (SH94).

To create Figure 2.1, the counts used for traffic flow at the Haast Pass have been estimated from the counts taken at Haast Bridge and at Lake Wanaka. Another count had been taken at the Pass itself until 1978. The estimated counts are based on the relativity between these earlier counts at the Pass and those for the same period from Haast Bridge and Lake Wanaka to estimate travel across the Pass (Appendix 1, Table A1.1).

Some gaps in the data have been filled by interpolation. Annual daily data are estimated by Transit New Zealand from sample counts. The high figures in 1989 (Figure 2.1) have no obvious explanation. The daily counts from which the annual figures were estimated have been checked, and they show a genuine increase for the days sampled, but the extrapolation of these figures to an annual count may be misleading.

The counts used for Lindis Pass on SH8 are the lesser of the Omarama and the Tarras figures, with some interpolated figures (Appendix 1, Table A1.1).

The counts for The Divide on SH94 are those for Cascade Creek, for which daily traffic counts from 1985–1992 are available (Appendix 1, Table A1.2), with some interpolated figures (Appendix 1, Table A1.1).

### 2.2.2 Results

The annual data (1974–1992) for the three routes (Figure 2.1) show a pattern of slow consistent growth, with minor fluctuations generally moving in parallel. Note that, for the 1992 figure, the Haast Bridge count is well down yet all the other stations on that route, and most stations on the other two routes, are the same or higher than 1991. Traffic counts at Cascade Creek and Lindis Pass have increased at 5% pa (per annum) and 6% pa compound respectively since 1975, while Haast Pass traffic has increased only 2% pa. (Data for Cascade Creek (SH94) that are available for 1993, excluding May, June and December, show a slight increase on traffic counts for 1992.

Sealing of the road began in 1962. Table 2.1 shows the length of road (in kilometres) sealed each year for the five years from 1987 until 1992 when sealing was completed.

Table 2.1 Length (km) of Milford Sound road sealed each year, from 1987 until 1992 when sealing was completed.

Year	Kilometres
1987/88	0.6
1988/89	3.3
1989/90	6.7
1990/91	1.5
1991/92	1.3

Figure 2.2 shows the seasonality in traffic flow on the Milford Sound road on a monthly basis. As data are not available for May, June and December 1993, counts for these months have been set to 1992 figures.

Figure 2.2 Seasonality in average daily traffic flow per month at Cascade Creek on Milford Sound road, for 1990–1993.

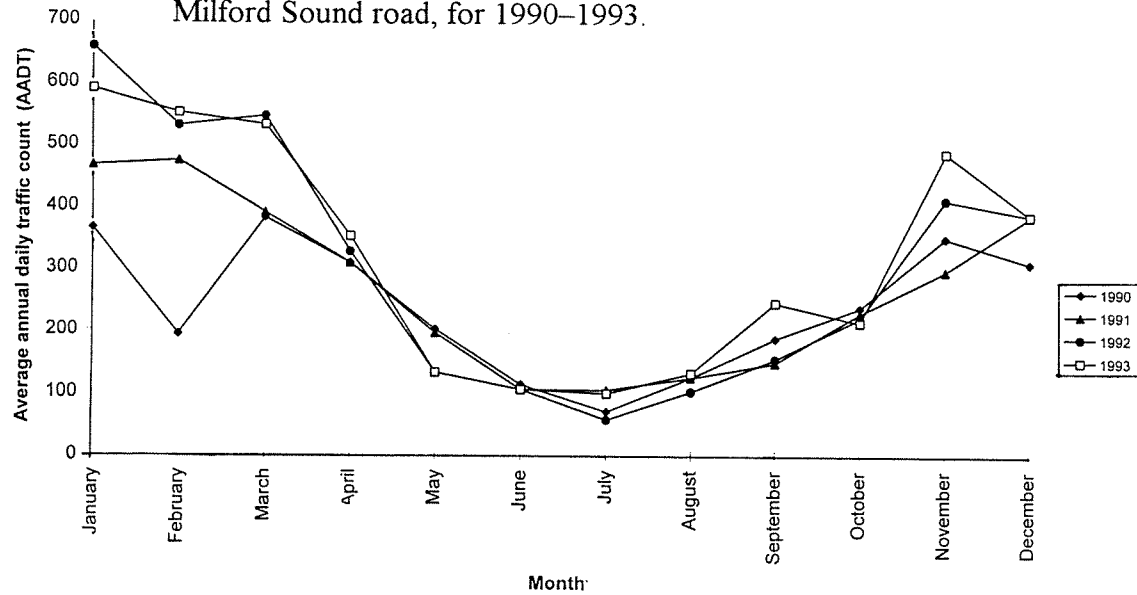
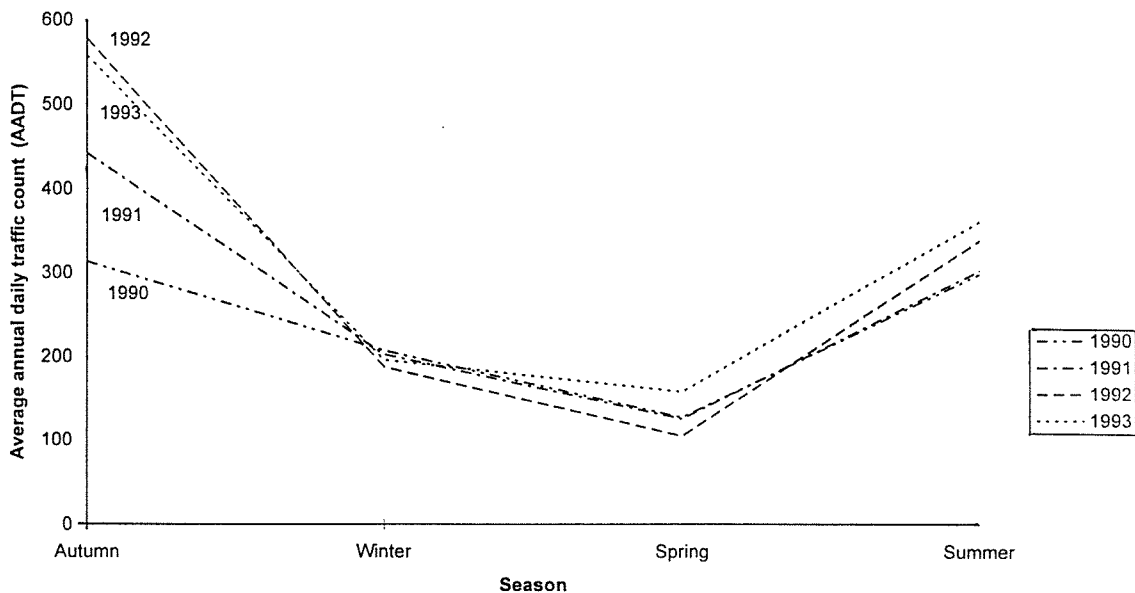


Figure 2.3 shows the same data on a seasonal basis. The seasons relate broadly as follows: Summer – December, January, February; Autumn – March, April, May; Winter – June, July, August; Spring – September, October, November. If anything, the degree of seasonality has increased which would be expected with the increasing tourist numbers.

Figure 2.3 Seasonal variation in average daily traffic flow per quarter at Cascade Creek on Milford Sound road, for 1990–1993.



For comparison, total numbers of international visitors visiting Queenstown, the West Coast and Milford Sound for leisure purposes between 1988 and 1993 are shown in Figure 2.4. These numbers were obtained from the ongoing International Visitor Survey undertaken by the Ministry of Tourism. Data for 1988–1991 are for "March years" but from 1992 on the financial year was changed to begin on 1 September. As the visitor survey was not carried out in 1991/92 the 1992 figure has been interpolated.

Since 1988/89 the number of international visitors has increased by 11% pa (compounded) for Queenstown and the West Coast, and 5% for Fiordland (principally to Milford Sound).

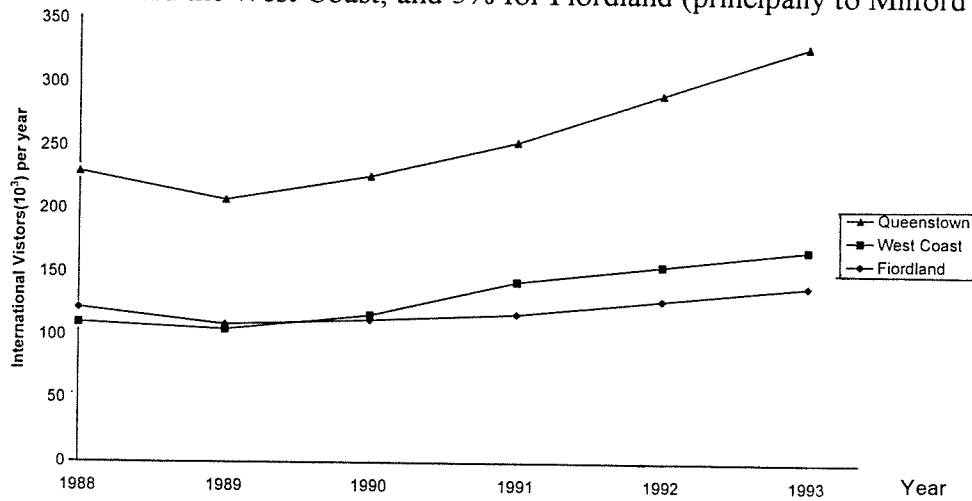


Figure 2.4 Numbers of international visitors per year to three major South Island tourist areas, from 1988 to 1993.

### 2.3 Analysis of Other Transport Modes

Statistics on flight movements into Milford Sound airport are published by the Airways Corporation of New Zealand Ltd. These show a decline in movements following a multiple fatality accident involving sightseeing flights in December 1989, but an upward trend is now emerging which is shown in Figure 2.5.

Figure 2.5 Flight movements in and out of Milford Sound airport, indicating trends in air-borne tourism between 1989 and 1993.



Tour operators were unwilling to share their data because of its commercial sensitivity, and data could be obtained from one coach operator only. The data analysis did not indicate any clear trend in tourist numbers. Anecdotal evidence however suggested that the volumes carried by the major operators are static or declining, but that this was in part related to the influence of backpacker and mini-bus operators who are increasing their activities at the expense of conventional tour operators.

## **2.4 Conclusions of Task 1**

Traffic on the Milford Sound road is very seasonal. It has been growing steadily since 1975 at around 5% pa – a similar rate to traffic on other tourist roads in the area and similar to the growth of international visitors to the South Island tourist region generally. No evidence of a change in the trend is obvious since the road was sealed, although such an effect would be difficult to detect because of the length of time (from 1962 to 1992) over which sealing has been done.

### **3. INTERVIEW PLANNING AND DESIGN**

#### **3.1 Objective**

The objective of Task 2, Interview Planning and Design, was as follows:

*Preparation for interviews (Stage 1, Tasks 3 and 4) including*

- *establish contacts and interview arrangements; and*
- *develop a check list of points to be covered for each group of interviewees.*

#### **3.2 Initial Contacts**

Contacts were established with a number of individuals and organisations within the tourist industry. Of these contacts, those relevant to the study are listed in Appendix 2.

#### **3.3 Interview Planning**

Check lists were developed of matters to be covered in the pilot survey of local tourist organisations (Task 3), and in the survey of tour operators (Task 4). These lists are included as Appendix 3.

The aim was to select interviewees for Task 3 (the pilot survey) from the following organisations associated with tourism:

- Milford Sound hotel and hostels
- Te Anau hotels, etc.
- Queenstown hotels, etc.
- Milford Sound boat operators
- Milford Sound and Te Anau retailers
- Queenstown and Milford Sound tourist organisations
- Local authority officers

Interviewees for Task 4 were to be selected from the following types of tourist operations:

- Coach<sup>1</sup> tour operators
- Inbound tour operators
- Overseas tour agents
- Car hire firms

---

<sup>1</sup> Coach - a long-distance passenger vehicle



## 4. PILOT SURVEY OF SELECTED LOCAL TOURIST ORGANISATIONS

### 4.1 Objective

The requirement for Task 3 was to:

*Conduct interviews to explore the evidence and perceptions of local individuals/organisations on the effects of sealing the route on tourist visits, particularly by foreign tourists. Interviewees will be:*

*(a) commercial: hotels/motels, local (Milford Sound, etc.) tour operators, and selected retailers; or*

*(b) non-commercial: local council officers and regional tourist organisations.*

*Interviews will generally be conducted by telephone.*

### 4.2 The Interviews

In the event, in Te Anau the interviews were undertaken face-to-face rather than by telephone. Interviews were undertaken with:

- |  |  |  |
|--|--|--|
| • Managing Director<br>Fiordland Travel Ltd<br>Te Anau | • Duty Manager<br>Luxmore Resort<br>Hotel, Te Anau | • Travel Manager<br>Mount Cook Line<br>Te Anau |
|--|--|--|

#### 4.2.1 Fiordland Travel Ltd

Fiordland Travel, based in Te Anau, could be expected to be a beneficiary of increased tourism to the Fiordland area as they operate a wide range of activities at Queenstown, Te Anau, Milford Sound and Doubtful Sound.

Sealing the road has reduced the number of people using Fiordland Travel's coach services to Milford Sound because it has increased:

- competition from "second tier" bus<sup>2</sup> operators (mini-vans, backpacker buses)
- number of rental cars being used to drive to Milford Sound.

The sealing has cut the travelling time by 30 minutes in each direction and this reduction in time means a more flexible range of options can be offered by coach operators. Before sealing, the return excursion of Queenstown - Milford Sound - Queenstown took up the limit of legal driving hours. The shorter journey time, plus the better quality ride now provided by the sealed road, has apparently encouraged operators with smaller vehicles to enter the market.

---

<sup>2</sup> Bus - general term for a passenger vehicle

Rental car companies used to discourage drivers from taking their cars to Milford Sound. Avis Rent-A-Car Ltd, for example, had a total prohibition at one stage. Some rental car companies gave discount vouchers for travel on the excursion coaches as alternatives for their clients.

While the coach service is important to Fiordland Travel, scheduled coaches represent less than 5% of vehicle travel to Milford Sound. Their launch trips represent the larger proportion of their business with coach tours (from other companies) providing almost 50% of Fiordland Travel launch passengers. Overall, the Managing Director said that visitors to Milford Sound had increased by 20% in 1992.

#### **4.2.2 Luxmore Resort Hotel, Te Anau**

The Duty Manager of this hotel indicated that the main business at the hotel is accommodating group coach tours. A high percentage of tours using the Luxmore Hotel cater for Taiwanese tourists who are all coming from or going to Milford Sound, because "... *You can't come this far and not go to Milford*".

The main effect of sealing the road has been to reduce the number of tours spending two nights in Te Anau. Now most tours stay only one night, although hotel occupancy has increased as the throughput is much higher. This is an increasing trend.

The Duty Manager's opinion was that the time saved on the road was being spent in the shops instead, purchasing sheepskin products particularly. "*The Taiwanese just shop and sleep.*" She considered that shops in Te Anau should stay open for longer hours as independent travellers want more to do. "*They are not interested in the caves - they've seen glowworms before.*" Some "two nighters" take the opportunity to visit Doubtful Sound as well whereas tourists with only one day tend to feel they are being rushed.

The Luxmore Resort Hotel is agent for InterCity Coachlines, and has always encouraged independent travellers to use the coach to Milford Sound rather than drive. They still do, stressing the benefits of a commentary and the chance to appreciate the scenery, although they also tell people that the road is now good.

The perception of the road is that it is much better and safer now it is sealed, although she did not think that sealing the road had had any effect on the total number of accidents or on the number of tourists.

#### **4.2.3 Mount Cook Line, Te Anau**

The Travel Manager of the Mount Cook Line office in Te Anau talked primarily in the capacity as agent for Hertz Rent A Car during the interview. Hertz business in Te Anau deals mostly in one way hires or stop-overs (i.e. drop one car, and pick up another some days later), as most clients are travelling to the walking tracks in the area, e.g. the Milford and Routeburn.

His personal reaction to sealing the road was – “*fantastic*”. Some of his reasons are based on the rate of accidents to rental cars, which have decreased from 1 per week to 1 or 2 per season. (Note that he gets involved even if the car was hired from another Hertz agent elsewhere.)

Before sealing, the accident claims were endless and almost all for the same cause – from “*travelling at 95-100 km/h (and never a claim from anyone travelling over 100!) on a bend. Loose stones are on the road - the car skids or overturns*”.

He discussed the policies of rental car firms that discourage clients using the Milford Sound road and he confirmed that Avis had had such a policy. Hertz used to have a sign which said that the road was safe as long as one drove carefully. The company still strongly encourages drivers to “*go with the flow*” by travelling into Milford Sound between 10am and 12 noon and out between 3pm and 4pm. In this way the number of conflicts with other vehicles can be reduced, especially in the narrow unsealed Homer Tunnel.

People still come in to leave their rental cars with him so they can take the bus because they have heard that the road is dreadful. However, when told that the road is now sealed, more people decide to take their rental car.

When asked if he thought the sealing had increased the total number of tourists however, his answer was – “*No*”. He did not think that drivers had been put off before and, although they might have come back saying the road was dreadful, they still thought it was worth going. And he mocked the idea of a tourist office in London saying, “*You should go to New Zealand now, they’ve sealed the road to Milford Sound*”.

### **4.3 Conclusions of Task 3**

The main effect of sealing the Milford Sound road has been a shift in independent travellers from bus to car. This, along with the general increase in South Island tourism (which will affect the Milford Sound road more than almost any other road because it carries almost entirely tourist traffic), will make it very difficult to identify directly any increase in tourist traffic resulting from the road being sealed.

Nevertheless, sealing has produced a noticeable change in travel patterns which suggests that significant benefits to some tourists will have accrued in the form of reduced costs or increased enjoyment of the experience. Some traffic generation should be expected as a consequence.

## 5. SURVEY OF SELECTED TOURIST OPERATORS

### 5.1 Objective

The objective of Task 4 was to:

*Conduct interviews with New Zealand tourist operators and others concerned with:*

- (a) promoting and arranging visits to New Zealand by overseas tourists; and*
- (b) arranging holidays for New Zealanders.*

*Interviewees will be from selected regional and national motellers, coach operators, car hire firms, travel agents, and tour operators. A combination of personal visits and telephone discussions will be used.*

*In respect to (b), the interviews will ascertain whether the state of the New Zealand roading system is a significant factor in influencing people's choice between holidaying in New Zealand or overseas.*

### 5.2 The Interviews

Eight tour operators were interviewed and their responses are summarised in Table 5.1. All the operators said that Milford Sound was an important part of their tour programmes, featuring in all or most of their tours. The scenic beauty is the principal attraction, with the cruise on the Milford Sound being an integral part of the experience.

Some operators referred to Milford Sound as a "*must see*" or the "*icon*" of New Zealand. The majority of operators said that there was no deterrent to visiting Milford Sound, but they mentioned some negative factors. The main draw-back is the distance from Queenstown, making the return trip a long day. Other problems which rated highly in operators' minds were closures caused by flooding, and of congestion in the Homer Tunnel. Contractual obligations with clients from the United States make such disruptions very costly.

Some operators use Te Anau as an overnight stop in one direction to overcome the length of the trip. Sealing the road has helped to reduce the travel time, and has made the trip more comfortable, although views about the impact on Te Anau were conflicting. At least one operator thought that sealing had reduced visitor nights and expenditure. The operators carrying Asian clients were more inclined to comment on safety aspects of the trip, the perception of which has improved.

No operator believed that sealing this particular road would have brought additional international tourists to New Zealand, especially as New Zealand roads generally have a good reputation.

Table 5.1 Summary of responses from eight tour operators.

No.	Main clientele: main itineraries	Factors which influence visitors	Effect of sealing Milford Road	Does the road system influence people
1	New Zealand: Christchurch-Queenstown-Milford Sound	Clean green image	Faster, more comfortable trip More rental cars People come whatever the conditions	No
2	North America: West Coast Germany: West Coast Japan: Mt Cook-Queenstown	Well promoted reputation as tourist area	No change to length of stay because of accommodation problems Some increase in numbers	No (not unless really bad, and New Zealand's roads are good)
3	UK/USA/Australia/Japan: Nelson - West Coast	Scenery	No idea	Generally no - has not heard any negative comment
4	Asia: Dunedin - Te Anau	Uniqueness Scenery Inexpensive (within NZ)	More tours especially peak season Reduced length of stay Reduced expenditure	No, tourists do not know what to expect
5	Japan: Australia: USA: Mt Cook - Queenstown West Coast Dunedin - Te Anau	Various Clean green, environmentally friendly image	Motor homes easier to promote	Not relevant
6	North America: Dunedin - Te Anau Taiwan: Japan: Germany: Mt Cook - Queenstown Queenstown West Coast	Open spaces Uncluttered highways Fresh air English speaking	Safer More people stay in Te Anau	No
7	Japan: Mt Cook - Queenstown	Clean green image Safety Price	Increased perception of safety	No (Air accident at Milford Sound had major impact)
8	Europe/Germany: West Coast	Various interests Clean green image	Passengers less nervous	No

### **5.3 Conclusions**

All the operators who were interviewed placed considerable importance on Milford Sound and could be expected to have an appreciation of the needs and concerns of visitors to the area.

Sealing the Milford Sound road has made the journey faster, more comfortable and safer, all of which are important factors because of the long distances travelling to and from Milford Sound.

There was a lack of unanimity about the impact of the change on Te Anau, and on spending by overseas tourists. However, none of the operators considered sealing the road would influence the total number of tourists to New Zealand.

From a theoretical standpoint, a change which made the trip to Milford Sound less onerous, more comfortable and safer would be expected to lead to higher visitor satisfaction, and ultimately to more visitors. It is at first surprising therefore that this survey of operators using the road had drawn such a universal negative to this suggestion.

The conclusion is that the effect being identified is a "second order" impact which, although likely to be present, will be swamped by the effect of other factors influencing tourist numbers (such as promotion, exchange rates, etc.), and by the change from excursion coach to rental car travel.

## 6. FURTHER RESEARCH

### 6.1 Research Brief

The research brief envisaged that the following tasks would be undertaken in Stage 2:

*Task 1: Survey of Local Residents and Businesses*

*Task 2: Extended Survey of Tourist Operators*

*Task 3: Survey of Holiday Motivations of New Zealanders*

*Task 4: Detailed Analysis of Surveys*

*Task 5: Relationship between Tourist Activity and Expenditure*

*Task 6: Review and Conclusions*

### 6.2 Proposed Programme

As a result of findings in Stage 1, a possible revised brief for Stage 2 was prepared with explanations as follows:

#### **Task 1: Survey of Local Residents and Businesses**

Significant further work was unlikely to be worthwhile (see Stage 1, Task 3).

#### **Task 2: Extended Survey of Tourist Operators**

Significant further work was unlikely to be worthwhile (see Stage 1, Task 4).

#### **Task 3A: Survey of Holiday Motivations of New Zealanders**

Undertaking such a survey was unlikely to be cost-effective (unless as an add-on to a survey carried out for other reasons); it will be of relatively high cost and would be unlikely to reveal that the state of the New Zealand road system is a significant determinant of holidaying in New Zealand or overseas. If this survey approach is to be pursued, then first a pilot survey should be undertaken, by telephone (say 20 interviews); and any decision on the main survey should be taken after the pilot survey is reviewed.

#### **Task 3B: Survey of Holiday Motivations of International Tourists**

This is a proposal for a new task. It would involve a survey of international tourists in New Zealand, to assess:

- whether the condition of the road network was a significant factor in their decision to holiday in New Zealand and on their pattern of travel in New Zealand;
- what they thought of the New Zealand road network and the unsealed routes in particular;
- whether, having experienced the New Zealand road system, this will influence their decision on future holidays in New Zealand;
- whether their experience of the New Zealand road system will influence what they tell friends/relatives about the attractiveness of New Zealand as a holiday destination.

Appropriate segmentation of the tourist market will be important in order to obtain the right answers, but first a pilot survey would be essential.

The survey could also explore how travel behaviour and gross expenditure of international travellers in New Zealand might vary if the road system were to be improved and hence less time were to be spent in travelling. However, if this topic is to be pursued it would be better done as a separate survey.

The survey might be most conveniently carried out in the international departure lounges of New Zealand airports. Possibly it could be undertaken by the Ministry of Tourism as an add-on to its own ongoing International Visitor Survey, or be undertaken separately but in consultation with the Ministry of Tourism.

#### **Task 4: Detailed Analysis of Surveys**

This analysis would depend on the outcomes of Tasks 1-3B.

#### **Task 5: Relationship between Tourist Activity and Expenditure**

This task would be to establish and summarise the relationship between international tourist activity in New Zealand (person days, etc.) and gross tourist expenditure in New Zealand. The relationships would be broken down by nationality, type of holiday, type of traveller, length of stay, etc.

The International Visitor Survey undertaken by the Ministry of Tourism would be used as the database for this task.

#### **Task 6: Review and Conclusions**

Stage 1 has failed to establish any significant link between improvements to the New Zealand road network (and sealing the Milford Sound road in particular) and numbers of or expenditure by international tourists in New Zealand. This result is not surprising, given the paucity of relevant data, the difficulties of the topic and the smallness of any effect that might be hypothesised.

Stage 2 would involve a further attempt to tackle this issue, at the broad level (i.e. not confined to the Milford Sound route) and chiefly through a survey of international tourists (Task 3B). A pilot survey would be undertaken, with say 20 respondents from New Zealand, as the first activity (Task 3A) in Stage 2. The results would be reviewed before a decision to continue was made. If they do not suggest significant effects, then it would be doubtful whether Task 3B would be pursued.

### **6.3 Conclusions**

The revised Stage 2 brief was considered with the conclusions from Stage 1, and the conclusion was that Stage 2, like Stage 1, was unlikely to provide any clear result because the effect to be isolated is likely to be too small in relation to other factors influencing tourist behaviour.



## **7. SUMMARY AND CONCLUSIONS**

### **7.1 Summary**

The Milford Sound road is of critical importance to New Zealand tourism because Milford Sound is promoted as one of the "must see" features of a tourist itinerary that covers New Zealand.

The sealing of the road has generated benefits for tourists through:

- reduced travel times for this long distance trip,
- improved comfort,
- increased perception of safety.

The particular changes in visitor itineraries that are evident include:

- fewer visitors staying two nights at Te Anau, but more bed nights in total,
- rental car drivers taking their cars to Milford Sound instead of using excursion coaches.

Views on the impact of the change on tourism expenditure were conflicting but the unanimous view was that the impact would be on tourist activity within New Zealand rather than on tourist numbers to New Zealand.

### **7.2 Conclusions**

While benefits to tourists could be expected to generate more tourists, the conclusion is that any such impact would be a second or third order effect, and would not be possible to isolate from other factors influencing tourist numbers and travel patterns.

As Stage 2 was unlikely to be fruitful, it was decided that the project should end on completion of Stage 1.



**APPENDIX 1. TRAFFIC COUNT DATA  
FOR TOURIST ROUTES**

Table A1.1 Average daily traffic counts for the years 1975–1992 at selected locations on State Highways 6, 8, 94.

Location	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
<b>SH 6</b>																		
Franz Josef	340	370	290	260	270	320	190	240	350					480	440	390	420	420
Haast Bridge	200	190	190	180	140	200	230	240						180	245	280	320	230
Haast Pass <sup>1</sup>	160	150	160	170														
Haast Pass <sup>2</sup>	162	162	171	171	133	190	181	181	209	209	209	171	171	171	228	228	247	219
Hawea	290	190	180	200	530	140	220	220	240			250		290	310	290	270	405
Lake Wanaka	170	170	180	190	150	210	190	190	220			180		210	240	240	260	270
<b>SH 8</b>																		
Omarama	260	540	290			370	340	350	340	450		570		520	840	530	790	550
Lindis Pass <sup>3</sup>	260	410	290	290	290	290	330	350	340	450	450	460	460	520	770	530	470	550
Tarras	450	410	360			290	330	410	580	500		460		570	770	1030	470	660
<b>SH 94</b>																		
Lumsden <sup>4</sup>	560	570	550	560	530	580	420	480	620	570		640		480	490	510	520	555
Te Anau	270	340	260	270	250	310	220	300	320	400		480		420	415	360	465	820
Cascade Creek	110	230	110	110	120	140	160	150	190	170	272	270	269	210	320	240	275	300
The Divide <sup>5</sup>	110	230	110	110	120	140	160	150	190	170	272	270	269	210	320	240	275	300

Table A1.2 Average daily traffic counts on a monthly basis for the years 1985–1992, obtained at Cascade Creek, SH94.

Year	1985	1986	1987	1988	1989	1990	1991	1992
January	595	608	470	367	367	365	466	657
February	398	325	397	193	193	193	473	530
March	371	294	361	350	350	381	389	545
April	293	287	274	247	760	308	308	326
May	151	226	232	165	450	201	195	132
June	113	113	103	103	127	113	105	105
July	83	93	126	126	198	70	104	57
August	115	125	127	107	248	124	124	102
September	183	162	157	157	187	187	148	154
October	200	250	208	208	208	237	228	220
November	243	321	408	408	312	350	296	411
December	302	312	300	300	368	309	385	386

<sup>1</sup> Traffic counter used only until 1978

<sup>2</sup> Traffic counts interpolated from counters at Haast Bridge and Wanaka

<sup>3</sup> Traffic count is lesser of the Omarama and Tarras counts, with some interpolated figures

<sup>4</sup> Lumsden count was taken on SH94

<sup>5</sup> Traffic count is that for Cascade Creek with some interpolated figures

**APPENDIX 2. TOURISM INDUSTRY CONTACTS  
USED FOR SURVEYS**

## **Tourism Industry Contacts**

The initial contacts for the surveys of tourist organisations and operators were made with the following people in the tourist industry, who are affected by tourism to and from Milford Sound.

**Richard Guthrey**

Managing Director, InterCity Coachlines,  
Auckland

**Kit Johnston**

Managing Director, Pacific Tourways Ltd,  
Christchurch

**Peter Lowry**

Executive Director, Inbound Tour Operators  
(ITOC), Wellington

**Paul Winter**

Executive Director, New Zealand Tourism  
Industry Association (NZTIA), Wellington

**Robyn Clarke**

Manager Visitor, Information Centre,  
Queenstown

**John Morrison**

National Manager Marketing Services,  
Hertz Rent A Car, Christchurch

**Tony Cummings**

Nelson Suburban Bus Line (SBL) Coaches,  
Nelson

**Graeme Hawsley**

Manager, Milford Hotel, Milford Sound

**Colin Ellis**

Tourmasters South Pacific Ltd, Milford,  
Auckland

**Andrew Ammundsen**

New Zealand Tourism Board, Wellington

**Bryan Hutchens**

Fiordland Travel Ltd, Te Anau

**Micheal Wiedemann**

Wiedemann Travel Ltd, Auckland  
(Mr Wiedemann is also President of ITOC)

**Bart Seward**

Golden Age Holidays, Auckland

**Tim Hunter**

Mount Cook Line, Christchurch

**Roger Wilson**

Milford Sound Development Authority,  
Invercargill

**Tracy McDonald**

Queenstown Promotions Board, Queenstown

**John Pierson**

Friendship Holdings, Christchurch

**Richard Sumner**

Pan Pacific Travel, Auckland

**Robyn Muir**

Magic Bus Network, Auckland

**Tony Boot**

Japan Travel Bureau, Auckland

**Greg Ritchie**

Contact Pacific Ltd, Christchurch

**Christine Goodyear**

Australia Pacific Tours, Auckland

**Russell White**

"ats Pacific", Auckland

**APPENDIX 3. CHECK LISTS USED IN  
SURVEY INTERVIEWS**

### **Task 3 Survey of Local Tourist Organisations**

The check list of the questions asked of staff operating local tourist organisations were based on the following matters:

- Segment the Milford Sound tourist market into:
  - domestic v international
  - access mode (car, tour coach, bus, air)
  - trampers, back packers, families, etc.
- What makes people come to Milford Sound?
- How much is transport a problem to tourists?
- What have been the effects of sealing the Milford Sound road on:
  - the number of tourists to Milford Sound
  - mode of travel
  - length of stay
  - activities in the Milford Sound area
  - expenditure in the local economy?
- To the extent that improving the trip to/from Milford Sound has increased tourism in this area, do you think this has resulted in:
  - diversion of tourists from other areas
  - New Zealand people making more recreational/holiday trips
  - attracting extra international tourists to New Zealand?
- What are the typical tourist activities in Milford, and
- What are typical tourist expenditure levels/patterns, by market segment, for:
  - boat trips
  - air trips
  - food/drink
  - accommodation
  - souvenirs
  - other?
- What are other tourist expenditures associated with trips to Milford Sound:
  - fares, petrol, etc.
  - accommodation
  - souvenirs
  - other?
- Obtain annual data on tourist expenditure in Milford Sound in relation to:
  - main establishments
  - traffic volumes



#### **Task 4 Survey of Tour Operators**

The check list of the main questions asked of the tour operators were based on the following matters:

- What is the role or importance of Milford Sound as a tourist attraction?
  - What are the main attractions of Milford Sound?
  - What are the main deterrents to visiting Milford Sound?
  - How much is transport and location a problem in deterring tourists, especially overseas visitors?
  - What factors influence overseas tourists to New Zealand in their itinerary and choice of tourist attractions?
  - How important is accessibility?
  - What has been the effect of sealing / improving the Milford Sound road on:
    - the number of tourists (domestic and overseas) to Milford Sound
    - mode of transport
    - length of stay at Milford Sound
    - activities in the Milford Sound area
    - expenditure in the local economy?
  - What factors influence overseas tourists in their decision to come to New Zealand rather than visit another country:
    - initial visit / repeat visit
    - national tourist attractions (e.g. Milford Sound)
    - transport / accessibility difficulties
    - the quality of the road system?
  - What could New Zealand do to increase
    - numbers and
    - the length of stay, of overseas visitors to New Zealand?
- List and rate the responses in order of likely effectiveness.

## 2. TRAFFIC COUNT TRENDS

### 2.1 Objective

The objective of Task 1 was to:

*Analyse traffic counts on the Milford Sound road (Cascade Creek control station, monthly counts) and compare trends over the last 10 years (availability permitting) with those elsewhere in Otago/Southland/West Coast tourist areas (e.g. Haast, Mt Cook). The analysis is to be in terms of seasonality and monthly periods.*

### 2.2 Traffic Count Analysis

#### 2.2.1 Method

Traffic count data for the years 1975–1992 were analysed for several points on State Highways SH6 (Blenheim-Westport-Haast-Invercargill), SH8 (Timaru-Tekapo-Lindis Pass-Tarras), and SH94 (Gore-Lumsden-Te Anau-Milford Sound).

Monthly data for the years 1985–1992 obtained at Cascade Creek (SH94) (Appendix 1, Table A1.2) and Haast Pass (SH6) were analysed. Estimates of counts were made for The Divide (on SH94), about 15 km east of the Homer Tunnel. These traffic count data are shown in Figure 2.1, based on the data supplied in Appendix 1. Data for 1993 were incomplete when this report was being compiled and have been excluded.

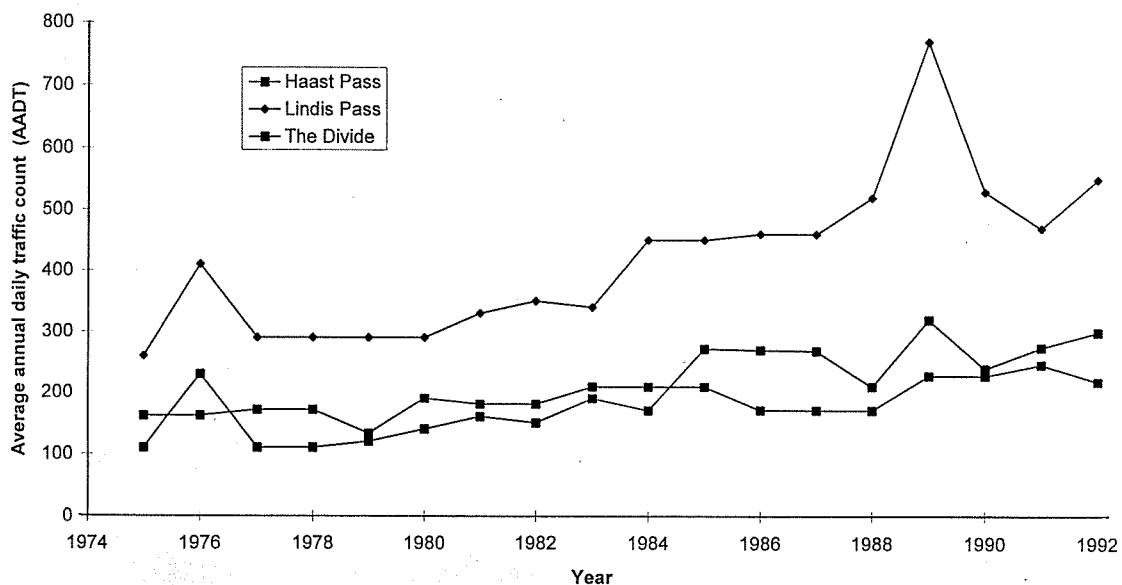


Figure 2.1 Average daily traffic flow for the years 1974–1992, obtained from counters positioned at Haast Pass (SH6), at Lindis Pass (SH8), and at The Divide (SH94).

Figure 2.2 shows the seasonality in traffic flow on the Milford Sound road on a monthly basis. As data are not available for May, June and December 1993, counts for these months have been set to 1992 figures.

Figure 2.2 Seasonality in average daily traffic flow per month at Cascade Creek on Milford Sound road, for 1990–1993.

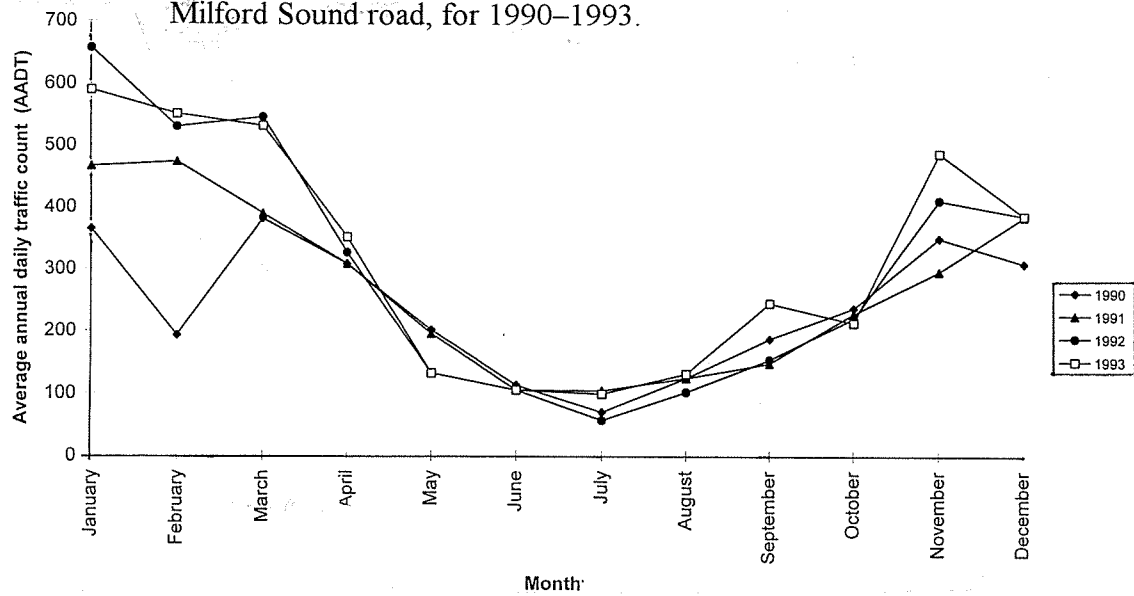
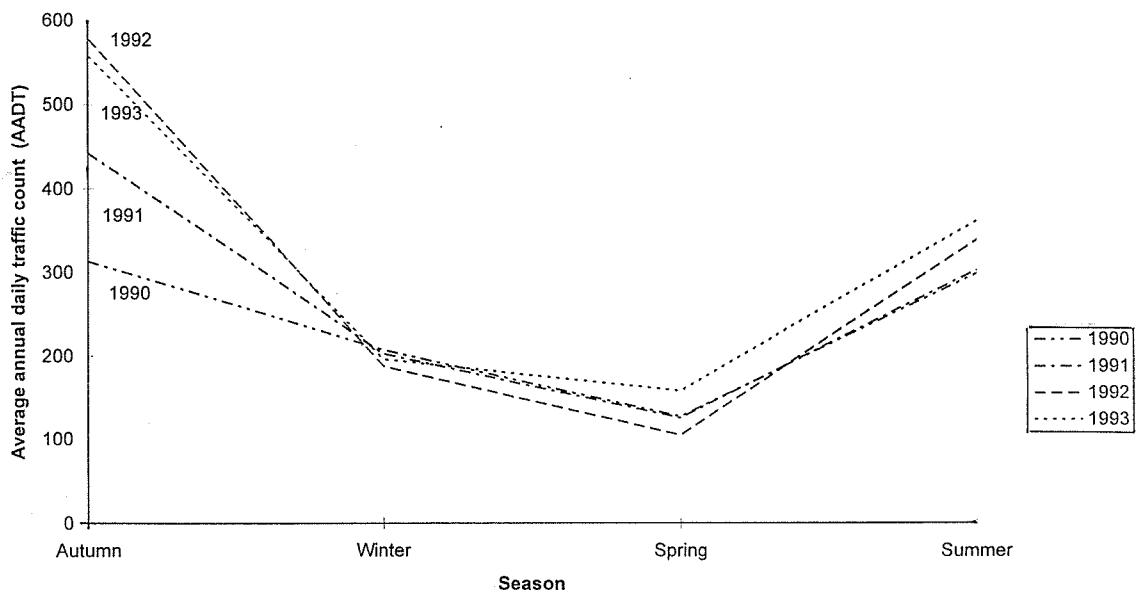


Figure 2.3 shows the same data on a seasonal basis. The seasons relate broadly as follows: Summer – December, January, February; Autumn – March, April, May; Winter – June, July, August; Spring – September, October, November. If anything, the degree of seasonality has increased which would be expected with the increasing tourist numbers.

Figure 2.3 Seasonal variation in average daily traffic flow per quarter at Cascade Creek on Milford Sound road, for 1990–1993.



For comparison, total numbers of international visitors visiting Queenstown, the West Coast and Milford Sound for leisure purposes between 1988 and 1993 are shown in Figure 2.4. These numbers were obtained from the ongoing International Visitor Survey undertaken by the Ministry of Tourism. Data for 1988–1991 are for "March years" but from 1992 on the financial year was changed to begin on 1 September. As the visitor survey was not carried out in 1991/92 the 1992 figure has been interpolated.

Since 1988/89 the number of international visitors has increased by 11% pa (compounded) for Queenstown and the West Coast, and 5% for Fiordland (principally to Milford Sound).

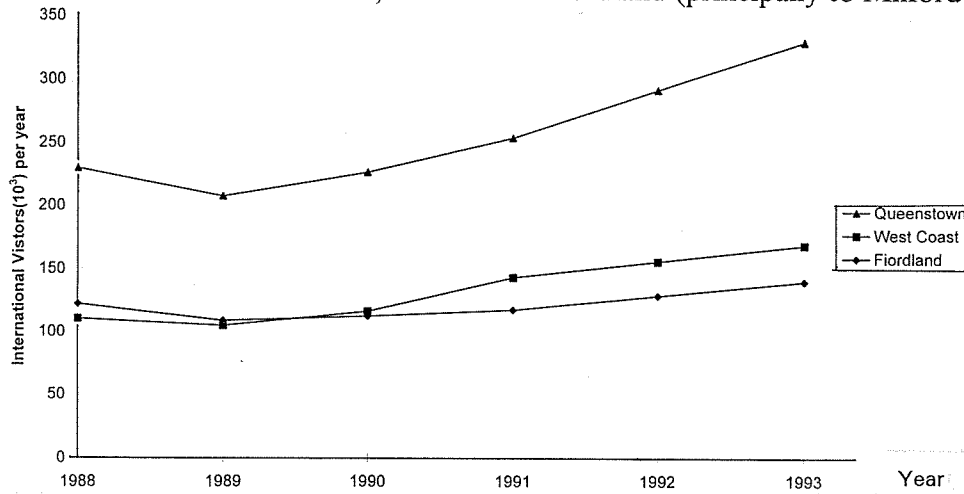


Figure 2.4 Numbers of international visitors per year to three major South Island tourist areas, from 1988 to 1993.

### 2.3 Analysis of Other Transport Modes

Statistics on flight movements into Milford Sound airport are published by the Airways Corporation of New Zealand Ltd. These show a decline in movements following a multiple fatality accident involving sightseeing flights in December 1989, but an upward trend is now emerging which is shown in Figure 2.5.

Figure 2.5 Flight movements in and out of Milford Sound airport, indicating trends in airborne tourism between 1989 and 1993.

