

AN ECONOMIC ANALYSIS OF RAIL TRAILS IN VICTORIA, AUSTRALIA

Dr. Sue Beeton
Senior Lecturer in Tourism
La Trobe University



Photos courtesy of Railtrails Australia

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*Sue Beeton, PhD
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EXECUTIVE SUMMARY

Rail Trails are multi-use tourism and recreation trails using abandoned railway lines for use usually by cyclists, walkers and horse riders. Many of the disused railways in Australia are in rural areas, providing unprecedented access to and through some spectacular scenery and bushland, along with associated personal and community benefits.

The main aim of the study was to establish the economic benefits of the development of Rail Trails to the communities surrounding the trails, especially in terms of direct and indirect employment and financial injection. The ongoing costs of community-based projects such as Rail Trails need to be considered against the benefits (in this case, economic), which are many, but have not been adequately quantified in Australia.

A self-completion survey was developed, initially as a mail-back questionnaire of visitors to the three rail trails in the study (the Murray to Mountains, Warburton and East Gippsland trails). The data included demographic, psychographic and economic expenditure data, and was conducted over the autumn holiday period. A web-based survey was made available on the Bicycle Victoria web site for people who had visited any Rail Trail in Victoria at some time. The results from the on-line survey were used to validate the results from the main survey.

While there are clear differences between the type and level of economic injection for each trail, the overall economic effect of Rail Trails remains significant. For every visitor day at the Rail Trails, \$51.10 of expenditure is injected into the economy, which compares positively with overseas studies. In addition, this study demonstrates that there are major differences between sector and overall economic contribution. Such knowledge can be used for future facility and business planning as well as funding/financing decisions.

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1.0 INTRODUCTION

Rail Trails are multi-use tourism and recreation trails that are sited on abandoned railway lines for use usually by cyclists, walkers and horse riders. The railway structures are of particular interest to recreationists due to the limitations of railway engines when climbing hills, resulting in a cleared and hardened track with no sharp rises. Also, the actual regions they travel from, to and through are often desirable touring places and, apart from level crossings with intersecting roads, are free of motor vehicles. Many of the disused railways in Australia are in country areas, providing unprecedented access to and through some spectacular scenery and bushland, along with associated personal and community benefits. According to the University of Massachusetts, “Rail-trails provide excellent recreation and transportation opportunities, preserve critical open space, create natural corridors for wildlife and enhance communities in the process. But rail-trails do even more, they bring money into the communities through which they pass.” (University of Massachusetts, n.d.)

While they have existed in the United States over thirty years through the *Rails to Trails Conservancy* and in the UK as *Sustrans*, Rail Trails are a relatively new concept in Australia. The Australian ‘equivalent’ was established in 1994 by a group of railway history enthusiasts (and supported by some rural state politicians in Victoria and Western Australia) as Rail to Trails Australia, which was later modified to Railtrails Australia (Bradshaw, 2002).

One of the challenges of Rail Trails is their multi-use nature, which requires particular attention, especially in terms of management, maintenance and resource allocation. Beeton (2003) notes that “[l]and management agencies that have made the decision to permit and encourage multiple use on their trails ... are confronted with a range of complex management issues apart from purely environmental”. The linear nature of trails sees them traversing numerous regions with different agencies responsible for their development and maintenance, such as local councils. This is particularly evident in the case of Rail Trails, where committees have been developed to oversee the development of the trails. However, most of the members are voluntary (such as in Victoria), and securing funding for track maintenance has become a real issue.

The environmental benefits of utilising land for recreation and tourism that has already been hardened for other uses are recognised (see Brown et al, 1987; Hendee et al, 1990; Mercer, 1991; Newsome et al, 2002), as well as the social benefits relating to health and wellbeing of trail-related activities (see Bramwell and Lane, 2003). However, the economic benefits of utilising

disused publicly-owned land that (such as a rail line) for other purposes is not adequately quantified, especially in Australia. If it is to be utilised for tourism and recreation, the disused rail network requires development, maintenance and upgrading, however as it is on land owned and managed by a public agency (in the Australian case, the Railways), there are few options to achieve this. Resources need to be allocated for trail development, which could be provided by state or local government, or the trails sold (or given) to not-for-profit community groups as in North America, or even to private enterprise. However, with the relatively low population density and visitation in and to Australia, responsibility for such public amenities tends to fall to the government, on a federal, state or local scale. Nevertheless, Queensland is testing a model similar to North America, as outlined in the following discussion.

Currently under the responsibility of the states, there are at least two different management models for Rail Trails in Australia. In Victoria, Rail Trail Committees such as those mentioned above have been established, with local government providing their basic legal structure. Each committee is a non-profit incorporated entity with voluntary community and interest-group members as well as local government involvement. Queensland is developing a not-for-profit governed by a Board of Directors from the local community and relevant state authorities, similar to the US model (Bradshaw, 2002). Nevertheless, whether government, not-for-profits or private enterprise manage the site, it still needs to be maintained.

Therefore, the ongoing cost of such projects needs to be balanced against the benefits (in this case, economic), which are many, but have not been adequately quantified. In a study in the United States, it was found that annual benefits ranged from US\$1.9m to US\$8.5m, averaging out at US\$4.81 to US\$49.80 per day, depending on the trail and the method of measurement, which in this instance attributed economic values to elements such as health benefits, aesthetic beauty and community pride (Siderelis and Moore, 1995). Due to a smaller population (both in terms of residents and visitors), and the decision not to cost non-economic benefits for this study due to its high level of subjectivity, such figures are not expected to be replicated in Australia. Therefore, it is important to conduct independent studies in this country that relate to actual economic injection as opposed to supposition based on varying international studies.

This project has focused on three trails in the state of Victoria, Australia, however its significance goes beyond the local areas, as rail trails are being developed around the world. As a consequence of the small amount of relevant research regarding the specific economic benefits of the trails, there have been limited resources applied to their development and maintenance.

Once the value of utilising disused rail lines is established, local communities and their associated governments can plan and develop such resources for their regions into the future.

This report outlines the results of a study undertaken by La Trobe University into the economic benefits of Rail Trails in Victoria. Dr. Sue Beeton, Senior Lecturer in Tourism undertook the research. Members of the respective Rail Trails Committees and Bicycle Victoria assisted in the dissemination of research material.

After outlining the aims and objectives of the study, relevant literature from around the world is reviewed, the research methodology discussed, results outlined followed by a discussion and conclusion. Suggestions for further research are also included.

1.1 Aims and Objectives

The main aim of the study was to establish the economic benefits of the development of Rail Trails to the communities surrounding the trails, especially in terms of direct and indirect employment and financial injection. The secondary aim was to recommend a process of ongoing maintenance of Rail Trails in relation to the flow of economic benefits (such as who should be paying for track maintenance).

1.2 What do we Really Know? (The Literature Review)

As noted earlier, most of the economic studies on Rail Trails have been conducted in North America, with some analysis being conducted on recreational trails in New Zealand and the United Kingdom. It is difficult to locate any such material in Australia, however there have been economic analyses of nature-tourism enterprises on public land that has assisted in developing the research instrument and analytical process. For example, a recent feasibility study for the Department of Natural Resources and Environment (DNRE) on a canopy walk takes into account the direct income generated by the walk itself (ticket sales, souvenirs etc.) as well as the regional economic benefit. The estimated potential of the regional economic benefit began at \$3.5m in the first year, increasing to around \$8.3m by the fifth year (DNRE, 2002). The economic assumptions made in the report have informed this project and are introduced in later sections, where relevant.

While the DNRE report outlines its methodology and assumptions, it does not discuss the rationale or assumptions behind its choice of the economic multipliers. Many of the studies located for the background information (literature review) for this report fail to provide any

justification for their results or methodological rigour, resulting in some questionable information.

1.2.1 North American Economic Studies on Multi-Use Trails

The main group involved with the Rails to Trails network in the United States is the Rail to Trails Conservancy (RTC) who supports the development of Rail Trails through providing advice, assistance and advocacy. They claim that:

Across the United States, trails and greenways are stimulating tourism- and recreation-related spending. Trail and greenway systems have become the central focus of tourist activities in some communities and the impetus for kick-starting a stagnating economy. (RTC, n.d., p.2)

A report released in 1992 by the United States National Park Service (NPS) recognised that understanding the economic effect of a trail is a complex process that needs to consider the expansion of existing businesses related to travel and accommodation, equipment, food, souvenirs and maps as well as the newly created direct jobs related to the trail (NPS, 1992). The study also looked at individual expenditure on three multi-purpose trails, finding that the average daily expenditure for those on trails in rural Iowa was US\$9.21 and Florida being US\$11.02, while an urban trail in California generated US\$3.97. Even though the urban trail was much lower, the higher visitation levels can make such expenditure significant to the region. The average economic activity for these multi-purpose trails was US\$1.5m. (NPS, 1992)

A local economic study found that visitors to a trail in Miami spent an average of US\$13.54 per visit on food, beverages and transportation to the trail. With an estimated 150,000 trail users a year, this is a significant injection into the local economy (Ohio-Kentucky-Indiana Regional Council of Governments, 1999). Visitors also spent around US\$277 a year on clothing, equipment and accessories to be used on their trip, however this benefit accrues at their home base, not at the trail.

In addition, the taxes from trail-related sales provide economic benefits for the state and local communities. An example from a Rail Trail in Maryland notes that the tax-income to the state was in the nature of US\$303,750, while the maintenance costs for the same period were US\$191,893. (University of Massachusetts, n.d.)

A further economic benefit seen in the United States has been the increase in property values around some popular trails. A Wisconsin study reported by the RTC found that lots adjacent to the Mountain Bay Trail sold at an average of nine percent higher than similar properties not so located, and that the trail-based lots sold much faster (RTC, n.d.). In addition, a further NPS study notes that property values have increased along some trail corridors, however their evidence appears to be anecdotal (NPS, 1995).

Cyclists are major users of Rail Trails due to their smooth surfaces and small gradients. Consequently, a study on the economic impacts of bicycle tourism in Maine (the Maine Report) is a valuable source of data, even though it does not focus specifically on Rail Trails (Wilbur Smith Associates et al, 2001). The study considered the direct, indirect, induced and total economic effects of cycle tourism, as well as forecasting the potential economic impact of expanding bicycle tourism in Maine. For this current study, we are primarily interested in the first section, namely the current economic effects. The detailed report on this study provides a publicly accessible examination of its analysis and reporting than some of the studies noted above.

The Maine Report notes that the distribution of spending on bike tours is a quarter to a third on lodging, a little more on restaurants, bars and groceries and just under that on personal expenditure, including bike repairs. In a detailed discussion of measuring economic impacts, the report identifies two impact types, namely the direct impact and the multiplier (the sum of all locally provided indirect goods and services needed to produce the tourism product, plus the effects of increased household earnings). They estimated that self-guided bicycle tourists spent US\$55 per day, while guided tour cyclists spent around US\$115 per day, with a total estimated expenditure to be over US\$5.78m in 1999. Direct expenditure for day-trippers was US\$27.5m, with around 55 percent from out of the state. When considering the multiplier effect on these figures, they adopted a top-down approach from national input-output tables, estimating it to be less than 1.0, with US\$33.4m in direct expenditure yielding a further US\$28m.

1.2.2 Europe and United Kingdom Economic Studies on Multi-Use Trails

Studies in the United Kingdom and Europe tend to support the results of the American studies reported above. National tourism surveys indicate that domestic cyclists spend around £9 on day trips, with £146 on overnight trips, with overseas tourists spending around £300 per trip (Sustrans, 1999). Sustrans also notes that the overall direct tourism and leisure expenditure is around £635m per annum.

Surveys of cycle paths in the UK have reported average daily expenditures from £7.28 per person to £24.54 by holiday-makers (Lumsdon, 1996). In a study of a multi-use path around the south-west English coast, it was found that with over 1 million visitors a year the path brought more than £15m to the regional economy, generating over 800 full-time jobs (SWCP Steering Group, 1997).

A study of Veloland Schweiz National Cycling Routes in Switzerland found that an average of SFr.29 was spent per day on the cycling routes, with SFr.121 spent by those on a holiday. The higher rate for holiday-makers is interesting and supports the promotion of such trails to tourists, if increased economic benefits are required.

1.2.3 New Zealand Economic Studies on Multi-Use Trails

Outdoor, trail based activities are prevalent in New Zealand, however it is difficult to find readily available publications of economic impact studies of trails. In a study of the Otago Central Rail Trail, Blackwell (2001) found that it was the economic benefits that were most widely acknowledged community benefits identified by trail users and local residents. However, those studied believed that the extra income was small and seasonal. Accommodation providers and other businesses were unable to quantify the effect on their business, even though they felt that they were getting extra business from the trail. The actual economic impact was not measured or clearly understood by any of the businesses, demonstrating the need to quantify economic benefits in order to assist in business and community planning as well as trail development, depending on the actual results.

1.2.4 Australian Economic Studies on Multi-Use Trails

As with New Zealand, actual economic studies of trails in general is extremely limited, with most reports referring to the US and UK research outlined above. Sinclair Knight Merz (1999), in a bike path strategy for Wangaratta (near the Murray to Mountains Rail Trail) estimated that a bicycle trail would bring around \$40.69 per visitor night and attract an additional 3,750 visitor days from Bicycle Victoria members and additional 3,600 visitor days from backpackers. However, the rationale behind these estimates is not clearly outlined, and the results are quite ambitious, even in US terms. They apply an estimated regional multiplier of 1.15, which is actually lower than the current Victorian regional multipliers as established by the Centre for Sustainable Regional Communities at La Trobe University (CSRC, 2003), but their high visitation figures and initial expenditure contribute to such ambitious results.

1.2.5 The Social Dimension of Recreational Use of Rail Trails

While this study focuses on the economic elements of Rail Trails, it is important to recognise some of the social elements of the trails, as many of them are closely linked to the economic outcomes.

Sustrans, in the UK, recognises the social benefits of developing cycle tourism as being environmentally sustainable, reducing excess traffic (providing rural traffic-calming), making use of existing, under-utilised or redundant resources (such as disused rail lines), improved facilities for local people and enhancing personal health, fitness and wellbeing (Sustrans, 1999).

In Blackwell's (2001) study of the Otago Central Rail Trail, a series of personal social and community benefits were identified by those interviewed, including:

- mental and physical wellbeing such as health, aesthetic appreciation, sense of achievement
- learning benefits such as an understanding of what it may have been like to work on the railway
- being together as a family
- meeting like-minded people
- bringing 'new faces' into small rural communities, enhancing social interaction
- sense of pride and community identity

Revitalisation of local (especially rural) communities has strong currency throughout the world, with community development professionals being employed by many government departments to address the decline in many rural communities. Tourism is recognised as a significant element in community revitalisation, and as such Rail Trails are noted as important contributors (University of Massachusetts, n.d.; Mills, 1990). Urban-based Rail Trails also have the ability to enhance urban centres and connect people with places, creating a sense of local community in cities (Rails to Trails Conservancy, n.d.).

In addition, Rail-Trails provide excellent opportunities for people with mobility disabilities, such as those using wheelchairs and special cycles, walk with support, are sight or hearing-impaired. The traffic-free nature of Rail Trails, limited gradient and the ability to seal the surface provide an appealing alternative for mobility-impaired people. In the UK, Sustrans has noted the popularity of structured cycle routes with wheelchair users, particularly on Railway Paths (Sustrans, 1998).

1.2.6 Conclusion

The studies cited above demonstrate the broad range of economic benefits that can accrue from multi-use trails, and in particular from disused resources such as railway lines. The levels of such benefits are dependent upon specific economic, social and political nature of each region; however, most have been noted to some extent, in all studies.

To summarise, the potential benefits are:

- Creation of jobs during and after construction
- Increased direct expenditure
- Increased induced and indirect regional income
- Increased tax income
- Higher land prices
- Opportunities for new/expanded local enterprises
- Broadens the tourism portfolio of a region

While economic costs include:

- Opportunity costs for government funding to be used for other services
- Higher land prices

Some of these are directly related to specific political structures in certain regions and countries (such as tax revenue), but even the potential of such benefits should not be discounted, as particular economic/political situations may change. In summary, the various economic contributions that have been identified around the world are outlined in Table 1.1.

Table 1.1 Economic Contribution of Cycling Trails around the World

Country	Study	Average per Day	
			Aust \$*
USA	<i>National Park Service (NPS):</i>		
	Iowa	US\$9.21	14.12
	Florida	US\$11.02	16.90
	California (urban)	US\$3.97	6.09
	<i>Ohio-Kentucky-Indiana Regional Council:</i> Miami	US\$13.54	20.76
EUROPE	<i>Maine Report:</i> Self-guided Tours	US\$55.00 US\$115.00	84.33 176.32
	<i>England National Study:</i> Day trips	£9.00	22.13
	Overnight Trips	£146.00	358.98
	<i>UK Cycle Paths Survey:</i> Day Trips	£7.28	17.90
	Holiday makers	£24.54	60.33
	<i>Switzerland Cycling Routes:</i> Day Trips	SFr.29	32.71
	Holiday makers	SFr.121	136.48
	No quantifiable studies available		
NEW ZEALAND			
AUSTRALIA	<i>Consultant's Estimate:</i> Victoria	\$40.69	\$40.69

* Australian dollar value calculated on international exchange rates at August 9, 2003

2.0 METHODOLOGY

Before outlining the methodological approach adopted in this study, it is valuable to look at the elements of an economic analysis and some of the concepts. While many economic terms are in common use, expressions such as ‘economic multipliers’ can be applied without a clear understanding of what they entail.

2.1 Elements of an Economic Analysis

Economically, tourism benefits regional areas in a number of ways. *The direct effects* include spending by tourists on items such as accommodation, prepared food, transport, retail trade, cultural and recreational spending. The Australian Bureau of Statistics (2000) has set out to capture the direct tourist expenditure and the extent that it impacts on other industry sectors through the development of a Tourism Satellite Account, released in 2000. This provides overall economic data for Australia which has been applied at the state level by some departments, such as Tourism Victoria. However, this top-down approach assumes that all states and territories in Australia respond in the same way to tourism, which can cause problems when taken down to a regional level.

The indirect effects of tourism are linked to the supply of inputs for the above purchases, such as raw materials and trade services. Finally, economic activity will also generate more employment, which in turn will lead to *induced effects* in the form of additional consumption by those earning wages generated directly and indirectly by tourism. When the sum of these effects is related to the initial direct effect of tourism, a series of *multiplier effects* for output, income and employment can be applied to the gross regional product. However, multipliers must be treated carefully, as a major issue in relation to tourism multipliers has been their over-estimation, resulting in unrealistic expectations and failed enterprises (Leiper 2003).

In order to address the concerns expressed above, La Trobe University developed and tested a range of regional Output multipliers throughout the states of Victoria and into New South Wales (CSRC, 2003). Output multipliers take into account the initial effect and the industrial support effect (direct and indirect effects). However, Type 1 Output multipliers do not take into account the induced effects, whereas Type 2 Output multipliers include all three effects. In an effort to provide the most accurate picture, while not wanting to over-estimate the multiplier effect, the Type 2 Output multipliers as developed by La Trobe are used in this study.

2.2 Study Area and Population

In order to establish baseline data that can be used to further study the effects of rail trails, well-established trails that receive significant tourist numbers and incorporate a range of local communities and businesses need to be examined. Consequently, the primary trails selected for the study were the Murray to the Mountains Rail Trail in North East Victoria, and the Warburton Rail Trail. The Murray to Mountains trail links the rural townships of Wangaratta, Beechworth, Myrtleford, Porepunkah and Bright, attracting tourists to the region, while the Warburton Trail, being close to Melbourne, has a more direct urban cycling base. In addition, the East Gippsland Trail was included for comparative purposes, as it is a newer and more remote trail. For a map of the trails, see Appendix One.

The population sample was selected at random over a period of four weeks, however it may not be truly representative of visitors to the trail due to distributor bias and the recent bushfires and drought throughout the study region that have affected regular visitor patterns. These elements are covered in more detail in the Section 2.4, Limitations.

2.3 Method

Two Self-Completion Surveys were developed, the first one being a mail-back questionnaire of visitors to the nominated rail trails. The data included demographic, psychographic and economic expenditure data, and were conducted over the autumn holiday period. In addition, the questionnaire was developed as a web based survey to members of Bicycle Victoria who had visited Rail Trails in Victoria. The results from the on-line survey were used to validate the results from the main survey.

A total of 1200 surveys were delivered to the three trails, as determined by general level of visitation as outlined by the respective Rail Trail Committees. The Murray to the Mountains Rail Trail received 450 surveys, while 550 went to the Warburton-Lilydale Rail Trail and 200 to the East Gippsland Rail Trail. They were distributed by volunteers identified by the Rail Trails Committees over a period of four weeks from mid April, limiting the distribution range to the availability of volunteers and visitors, so not all questionnaires were distributed. The four-day Easter holiday and a three-day Anzac Day public holiday fell in to this time, as did the two weeks of school holidays. Consequently, a broad range of visitors was approached even though not all questionnaires were utilised. The Murray to Mountains Rail Trail distributed 417 questionnaires, the Warburton Rail Trail 480, and the East Gippsland Rail Trail 105.

2.4 Limitations

A potential limitation to the project has been the summer bushfires that burnt for over eight weeks close to some of the trails. This not only delayed the distribution of the on-site surveys, but also affected the visitation to the study areas and may affect the data. This is considered in the Results, Discussion and Conclusion sections.

Volunteers from the respective Rail Trail Committees were co-opted to distribute the on-site questionnaires. They were instructed to hand them out to a broad range of visitors, and not just to select those who showed some interest. However, as with all distribution mechanisms, there is the possibility of some distributor bias. This is not apparent from the results, but should be kept in mind when utilising the data.

There is little baseline data at the local community level from which to compare the effect of existing rail trails on visitor numbers, consequently regional data has been used where necessary, taking a top-down approach. This may not sufficiently take in local conditions, however attempts have been made to supplement the data with other sources whenever they are available, such as the regional multipliers developed by La Trobe University.

3.0 RESULTS AND DISCUSSION

This section outlines the results of the mail-back questionnaire. It includes discussion of the results in relation to some marketing issues as well as the main focus of the economic significance of Rail Trails. The results were compared with the on-line survey and were found to be similar, confirming that respondents were representative of visitors to all Rail Trails. If required, further analysis of the results of the on-line survey will be undertaken in a separate study.

3.1 Respondent Profile

A total of 454 questionnaires were returned from all trails, with 57 from East Gippsland, 189 from the Murray to Mountains Rail Trail and 208 from the Warburton Rail Trail. This represents a return rate of 54%, 45% and 43% respectively. Over three quarters of the total respondents (77%) were spread evenly between ages 35 and 64, with a slight predominance of male respondents (55%). Education levels were higher than the general population, with close to two-thirds of respondents being tertiary educated, while a little under half (46%) worked in a professional capacity.

The great majority of respondents (89%) cycled on the rail trails, with a small percentage (9%) walking along them and a limited number (less than one percent) riding horses. This may reflect a bias in distribution of the surveys, however it is generally recognised that cycling is the main activity on Rail Trails throughout the world, supporting these usage figures.

Over one third of respondents were travelling with a companion, with a further 20 percent in small groups of three or four. There were two large cycling groups of 100 and 110 using the Rail Trails during the survey period, however only two members from each group responded to the survey, limiting any skewing of the results by these groups. The groups were both using the Murray to Mountains Rail Trail, suggesting that the trail appeals to such groups. While most respondents travelled in some sort of group, a significant proportion (11%) were alone, which has a major impact on marketing strategies. This phenomenon requires more study as single travellers are often excluded (incorrectly) as insignificant.

As this is an economic study, there were few questions directly relating to marketing and promotional elements, however it is not possible to totally separate marketing and economics, so some of the survey results point to elements relating to marketing. For example, respondents

were asked to identify where they obtained their information on the trail. This was an open question, and the first noted information source was recorded as outlined in Table 3.1.

Table 3.1 Information Sources Used (n=450)

Source	Frequency	Percentage
Live Locally	97	21.6
Friends & Relatives	132	29.3
Bicycle Users' Group	33	7.3
Bicycle Victoria	57	12.7
Previous Visit	9	2.0
Signs	10	2.2
Guidebook/ Specialty Magazine	46	10.2
Newspaper	22	4.9
Internet	4	.9
Visitor Information Centre	10	2.2
Walking Club	5	1.1
TV- Getaway	6	1.3
Other	19	4.2
Total	450	100.0

The sources of greatest use are local knowledge and information from friends and relatives, representing a high incidence of word-of-mouth promotion of some 51 percent. Other major sources are Bicycle Victoria and guidebooks or specialised magazines, with a slightly lesser use of other Bicycle User Groups. This indicates a desire in participants to gain information from sources that may provide some critical discussion in their recommendations, such as can be found in many guidebooks and associations' literature. The high regard of Bicycle Victoria as a source of information is significant, and the association must maintain its reputation for reliable information provision.

When we look at this by each trail in Table 3.2, there are some interesting differences between the trails, indicating a need for different marketing strategies. For example, the East Gippsland trail is predominantly used by people who have local knowledge (39%). This reflects the relative recent development of the East Gippsland Rail Trail as well as its distance from the major tourist generating region of Melbourne - 56% of overall visitors, while 72% of day-trips are taken by those living closer to the region (BTR, 2002). Consequently, it may eventuate that this trail is utilised most by residents from the local region. For other groups of visitors, guidebooks and specialty magazines appear to have the greatest influence for this trail. This differs significantly from the Murray to Mountains trail where friends and relatives form the major source of information for trail users.

Table 3.2 Information Sources Used for Each Trail (n=450)

Trail Info Source	East Gippsland %	Murray to Mountains %	Warburton %	Total %
Live Locally	39	11	26	22
Friends & Relatives	9	33	31	29
Bicycle Users' Group	4	16	0.5	7
Bicycle Vic	11	10	16	13
Previous visit	0	4	1	2
Signs	5	2	2	2
Guidebook/Specialty Magazine	14	11	8	10
Newspaper	4	5	5	5
Internet	0	2	0	1
Visitor Info Centre	9	2	1	2
Walking Club	2	2	0.5	1
TV - Getaway	0	0.5	2	1
Other	4	3	6	4
TOTAL (no)	56	189	205	450

As expected, the usage patterns differed significantly between the trails, particularly in terms of the length of trips taken, which ranged from one to fourteen days (Table 3.3). If we compare the percentage of respondents for each type of trip on each trail, it is clear that the trail closest to the major urban centre of Melbourne (population 3 million), the Warburton Rail Trail, sees predominantly day trippers. The Murray to Mountains Rail Trail is well established in an area that attracts adventure and nature-based tourists, consequently the range of length of stay for that trail was also anticipated.

Table 3.3 Percentage of Visitors per Trail by the Length of Trip

	No. of Days										Total No.
	1	2	3	4	5	6	7	9	12	14	
East Gippsland	78%	9%	6%	4%	4%						54
Murray to Mountains	40%	14%	25%	6%	5%	2%	4%	0.5%	0.1%	0.1%	187
Warburton	88%	11%	1%	0	0	0	0	0	0	0	207
Total No.	300	54	52	14	11	4	8	1	2	2	448

However, the figures for the East Gippsland Rail Trail require further consideration. The trail is distant from major urban and tourism generating centres, but does attract a more adventurous visitor who tends to stay longer in the region (BTR, 2002). Nevertheless, the high percentage of day visitors tends to refute this. As noted earlier when comparing information sources, this is a relatively new trail with lower visitation, but may also be attracting mainly local users at this

stage. The total number of visitor days of the population sample is 824, averaging out at 1.8 days per person.

All three trails are in different stages on Butler's Destination Life Cycle curve, which suggests that different marketing approaches may need to be adopted depending on where they are. For example, the Gippsland trail is still in the exploration phase, while the Murray to Mountains is consolidating and the Warburton trail is reaching (or exceeding) capacity.¹

3.2 Direct Expenditure

It is generally accepted that visitors staying overnight spend more money in the region. But, when we take the aggregate direct visitor expenditure data for all trails, this is not evident. Table 3.4 outlines the overall spend per person per day, where the one day trip cost is close to the two, three and four days.

Table 3.4 Overall Expenditure Per Person Per Day

Length of Trip (days)	Total Expenditure for study period (\$)	No. of Respondents	Expenditure Per Person Per Day (\$)
1	42,478	300	141.59
2	17,190	54	159.17
3	26,793	52	171.75
4	7,260	14	129.64
5	9,836	11	178.84
6	2,052	4	85.50
7	3,087	8	55.13
9	681	1	75.67
12	4,000	2	166.67
14	2,437	2	87.04
Total (\$)	115,814	448	132.33

In order to adequately understand the above data, we need to consider the expenditure relating to each trail. Table 3.5 summarises the overall daily per person expenditure at each trail. In this table we start to see the expected differences between the trails, with the more urban trail (Warburton) bringing a high of \$160.00 per day for a three day trip, down to a low of \$44.63 for day trippers, and an average of \$103.92 per day.

¹ See Butler (cited Hall, 2003) for more information on the life cycle.

Table 3.5 Overall Expenditure at Each Trail, Per Person Per Day

Length of Trip (days)	East Gippsland (\$)	Murray to Mountains (\$)	Warburton (\$)
1	229.52	328.95	44.63
2	163.00	200.85	107.14
3	97.00	177.02	160.00
4	220.00	114.58	
5	173.00	180.13	
6		85.50	
7		55.13	
9		75.67	
12		166.67	
14		87.04	
Total (\$)	176.50	147.15	103.92

While the overall expenditure is interesting, in order to fully understand the economic significance, it is important to break this down into the various sectors of tourism spending, providing data that can be applied to regional planning for the future.

Both the Murray to Mountains and East Gippsland trails are further away from major population centres (such as Melbourne), generating higher daily expenditure. Even though respondents talked about ‘day trips’, this relates specifically to the time spent on the trail, so for the more distant trails, money was spent on accommodation in the region even for so-called one-day visits to the trail. Table 3.6 outlines the accommodation expenditure per person, per day at each trail site. For the regions more than a few hours’ journey from major population centres, visitors tend to stay overnight in the region. Hence, many of those who identified as visiting the trail for one day (‘day-trippers’) are visiting the region for longer, which needs to be kept in mind when considering the results. As this did not show up in the pre-testing phase, it was not possible to separate such visitors, but does not affect the overall economic data.

3.2.1 Sector Expenditure

The Murray to Mountains Trail has a broad usage of different types of accommodation, whereas visitors to the East Gippsland Trail did not stay in hotels, and used little self-contained accommodation. As expected, the Warburton Trail did not attract large overnight visitation in terms of total direct dollars.

Table 3.6 Accommodation Expenditure at Each Trail, Per Person Per Day

Length of Trip (days)	East Gippsland					Murray to Mountains					Warburton				
	Motel	Hotel	B&B	S/C#	Camp*	Motel	Hotel	B&B	S/C	Camp	Motel	Hotel	B&B	S/C	Camp
1	15.76	0	4.76	0	3.19	16.81	0.40	40.53	15.60	29.25	0	0	5.08	0	0.57
2	18.00	0	32.00	0	16.00	30.37	1.11	3.70	0	28.31	21.79	1.80	7.95	0	3.02
3	16.00	0	10.00	0	10.56	21.03	7.70	4.54	21.21	15.84	0	90	0	0	0
4	0	0	0	97.50	1.88	14.17	0	0	5.83	24.15					
5	0	0	0	0	38.00	0	3.11	0	34.22	24.93					
6						0	0	0	0	60.92					
7						0	0	0	2.43	18.84					
9						0	0	0	0	27.78					
12						0	100.00	0	0	0					
14						7.46	0	0	18.75	0					
Total (\$)	16.59	0.00	15.59	97.50	13.93	22.46	22.46	16.26	19.61	28.75	21.79	91.80	6.52	0.00	1.80

#S/C refers to Self Catering accommodation

* Camp refers to Camping Grounds, Caravan Parks and Bush Camping

Table 3.7 breaks down the expenditure in to the non-accommodation areas of food and beverages (F&B), transport and fuel (Trans), cycling and other costs, while table 3.6 looks at overnight accommodation in order to see where the money is being spent. All expenditure figures were for money spent in the region during the visit.

Table 3.7 Non-Accommodation Expenditure at Each Trail, Per Person Per Day

Length of Trip (days)	East Gippsland				Murray to Mountains				Warburton			
	F&B	Trans	Cycling	Other	F&B	Trans	Cycling	Other	F&B	Trans	Cycling	Other
1	72.57	20.33	82.19	30.71	158.48	32.41	17.48	17.97	32.70	3.07	0	3.21
2	73	24	0	0	91.85	18.56	9.22	17.72	67.00	2.27	0	3.30
3	48.22	5.55	1.11	5.55	60.72	13.58	6.10	26.32	66.67	0	0	3.33
4	56.25	0	11.25	53.13	45.39	10.20	10.94	12.83				
5	120.00	10.00	0	5.00	101.69	6.93	1.82	7.42				
6					17.50	5.42	0	1.67				
7					20.54	5.89	0	7.42				
9					27.78	6.67	2.33	11.11				
12					66.67	0	0	0				
14					12.70	6.25	1.17	4.44				
Avg \$	74.01	14.97	31.52	23.60	60.33	11.77	7.01	11.88	55.46	2.67	0	3.28

Food and beverages are the major singular expense items for all trails. It is interesting to note that the Warburton Trail expenditure here was quite high at \$55.46 per person per day, suggesting that trial users are prepared to spend money on food and beverages in situ rather than carry them. The results for the Murray to Mountains Trail also indicate that day-trippers in particular are a stronger market for food and beverage outlets than others.

The two trails further away from Melbourne had significant expenditure on cycling equipment and repairs, with East Gippsland averaging a high \$31.52 per person per day, with the Murray to

Mountains also significant at \$7.01. This represents a potentially new industry in these regions, or at least indicates opportunities for growth as the popularity of the trails increases.

Of particular interest here is the “other” category that is quite high, particularly for the East Gippsland Rail Trail, suggesting that there are other areas of expenditure not encompassed by standard tourism economic categories. Where respondents identified what other costs they incurred has been categorised in Table 3.8. The most significant of these are clothing, wine and tours, particularly for the Murray to Mountains trail, which goes through winery country and incorporates a range of outdoor activities and support services such as clothing suppliers.

Table 3.8 Other Expenditure

	Clothing/ Boots		Wine		Gifts		Books		Hair		Tours/ Entry		Doctor		Bike Group Fees		Donation	
	\$	No	\$	No	\$	No	\$	No	\$	No	\$	No	\$	No	\$	No	\$	No
East Gippsland	177	1	0	0	0	0	0	0	0	0	425	1	0	0	0	0	840	1
Murray to Mountains	1885	6	775	6	230	3	233	3	90	1	614	7	287	2	140	4	5	1
Warburton	0	0	0	0	0	0	85	1	0	0	0	0	0	0	0	0	0	0
Total	2062	7	775	6	230	3	318	4	90	1	1039	8	287	2	140	4	845	2

Appendix Three has detailed tables of the direct expenditure data.

3.3 Indirect/Induced Expenditure and Multipliers

As noted previously Output multipliers take into account the initial effect, the industrial support effect and the consumption effect (direct, indirect and induced effects). The multipliers used for this analysis are Type 2 Output multipliers that include all three effects, whereas a Type 1 output multiplier would not have the consumption or induced effect. The Centre for Sustainable Regional Communities (CSRC) at La Trobe University has established Type 2 output multipliers for many shires in the state of Victoria. Those that relate to the rail trails studied are the Wangaratta, East Gippsland and Yarra Ranges Shires for the Murray to Mountains, East Gippsland and Warburton Rail Trails respectively. Multipliers for each of the regions were generated using REMPLAN[®] software, developed by the CSRC (2003) and are noted in Table 3.9.

Table 3.9 Type Two Output Multipliers

	East Gippsland Shire	Wangaratta Shire (Murray to Mountains Rail Trail)	Yarra Ranges Shire (Warburton Rail Trail)
Retail Trade	1.97	2.00	2.23
Accommodation, Cafes & Restaurants	1.89	1.81	2.06
Cultural & Recreational Services	1.84	1.77	2.06

Source: CSRC REMPLAN[©]

The table above illustrates the differences between some multipliers in certain shires over sectors. It is common for urban areas to have lower leakages than remote regions due to the lower need to import goods and services. Consequently, there is a higher multiplier for the Yarra Valley region, where the Warburton trail runs, resulting in higher injected income to the region. This demonstrates the importance of developing regional multipliers rather than top-down state or national ones.

3.3.1 Sector Economic Injections

When the multipliers are applied to the expenditure data, an interesting picture emerges as shown in Tables 3.10 and 3.11. Table 3.10 shows that every visitor to the East Gippsland Rail Trail injects an average of \$31.35 per day into the local motel sector, while visitors staying overnight in motels near the Warburton Rail Trail inject an average of \$44.89. This may seem contradictory, as it has previously been shown that more visitors stay overnight for longer in East Gippsland and the Murray to Mountains region than Warburton, and the overall direct expenditure is greater for both those regions (see Tables 3.3 and 3.5). However, as explained above, leakages are less for the Warburton Trail.

If we look at self-catering accommodation, however, the story is quite different. It can be assumed that many of the catering supplies for this type of accommodation are purchased locally, which will result in relatively higher expenditure and fewer leakages.

Table 3.10 The Multiplier Effect on Accommodation Expenditure at Each Trail, Per Person Per Day

Length of Trip (days)	East Gippsland					Murray to Mountains					Warburton				
	Motel	Hotel	B&B	S/C#	Camp*	Motel	Hotel	B&B	S/C	Camp	Motel	Hotel	B&B	S/C	Camp
1	29.79	0	9.00	0	6.03	30.43	0.72	7.36	28.24	52.94	0	0	10.46	0	1.74
2	34.02	0	60.48	0	30.24	36.87	2.01	6.70	0	51.24	44.89	3.71	16.38	0	6.22
3	30.24	0	18.90	0	19.96	38.06	13.94	8.22	38.39	28.67	0	185.4	0	0	0
4	0	0	0	184.28	3.55	25.65	0	0	10.55	43.71					
5	0	0	0	0	71.82	0	5.63	0	61.94	45.12					
6						0	0	0	0	110.27					
7						0	0	0	4.40	34.10					
9						0	0	0	0	50.28					
12						0	181.00	0	0	0					
14						13.50	0	0	33.94	0					
Av. (\$)	31.35	0.00	29.46	184.28	26.32	28.90	40.66	7.43	29.58	52.04	44.89	94.56	13.42	0.00	3.98
Overall	\$ 67.85					\$ 31.72					\$ 39.21				

#S/C refers to Self-Catering accommodation

* Camp refers to Camping Grounds, Caravan Parks and Bush Camping

As shown in Table 3.11 below, the most significant economic benefit for each trail is in the Food and Beverage sector. The highest is \$153.91 for the Warburton Trail, followed by \$139.92 on the East Gippsland Trail, and \$109.20 on the Murray to Mountains Trail. Some thought can also be given here to the optimum trip length in terms of daily yield. For example, the highest daily yield in terms of food and beverage is a one day trip on the Murray to Mountains Trail. However, due to the relatively small sample size for the East Gippsland Trail in particular, caution should be used when analysing these results. Nonetheless, they can be used as justification for further in-depth studies.

Table 3.11 The Multiplier Effect on Non-Accommodation Expenditure at Each Trail, Per Person Per Day

Length of Trip (days)	East Gippsland				Murray to Mountains				Warburton			
	F&B	Trans	Cycling	Other	F&B	Trans	Cycling	Other	F&B	Trans	Cycling	Other
1	137.15	40.05	161.91	60.50	286.85	62.82	34.96	35.94	76.36	6.85	0	7.16
2	137.97	47.28	0	0	166.25	37.12	18.44	35.44	248.02	5.06	0	7.36
3	91.36	10.93	2.19	10.93	109.90	27.16	12.20	52.64	137.34	0	0	7.43
4	106.31	0	22.16	104.66	82.16	20.40	21.88	25.66				
5	226.80	19.70	0	9.85	184.06	13.86	3.64	14.84				
6					31.68	10.84	0	3.34				
7					37.18	11.78	0	14.84				
9					50.28	13.34	4.66	22.22				
12					120.67	0	0	0				
14					22.98	12.50	2.34	8.88				
Avge \$	139.92	29.49	62.09	46.49	109.20	23.31	14.02	23.76	153.91	5.96	0	7.32
Overall	\$ 69.50				\$ 42.57				\$ 55.73			

When the overall figures in the two preceding tables are again averaged, figures for total (per trail per person per day) economic input can be estimated. The East Gippsland Rail Trail has an

average of \$68.68 per person per day, while the Murray to Mountains Trail is \$37.15 and the Warburton trail comes in at \$47.47. A final figure for the regional economic injection of Rail Trails in Victoria can be extrapolated as \$51.10 per person per day. However, as has been demonstrated, the figures differ dramatically by the length of stay and type of expenditure, which is also a function of the particular nature of each trail, such as distance from major source markets, other activities and amenities.

4.0 CONCLUSIONS

Few tourism economic studies break down their effect into specific sectors as this study has, amply demonstrating the importance of drilling down into the economic data. The results have shown that there are major differences between individual sectors funded by Rail Trail visitors in terms of their overall economic contribution to a region. Such evidence can be used for business, facility and community planning, as well as underlining the need for further research into this trend.

In order to capitalise on the opportunities Rail Trails offer, their future must be secure, especially when it comes to financial support for ongoing maintenance. This study provides some strong economic arguments for such support. While there are clear differences between the type and level of economic injection for each trail, the overall economic effect of Rail Trails remains significant. For every visitor day at the Rail Trails, \$51.10 of expenditure is injected into the economy. Table 4.1 compares the studies on the average daily economic contribution identified in Section One and outlined in Table 1.1 with the results of this study.

Table 4.1 Comparison of the Economic Contribution of Cycling Trails

Country	Study	Average per Day in Aust \$*
USA	<i>National Park Service (NPS):</i>	
	Iowa	14.12
	Florida	16.90
	California (urban)	6.09
	<i>Ohio-Kentucky-Indiana Regional Council:</i>	
	Miami	20.76
EUROPE	<i>Maine Report:</i>	
	Self-guided	84.33
	Tours	176.32
	<i>England National Study:</i>	
	Day trips	22.13
	Overnight Trips	358.98
	<i>UK Cycle Paths Survey:</i>	
	Day Trips	17.90
	Holiday makers	60.33
	<i>Switzerland Cycling Routes:</i>	
	Day Trips	32.71
	Holiday makers	136.48
NEW ZEALAND	No quantifiable studies available	
AUSTRALIA	<i>Consultant's Estimate:</i>	
	Victoria	\$40.69
	East Gippsland Rail Trail	\$68.68
	Murray to Mountains Rail Trail	\$37.15
	Warburton Rail Trail	\$47.47
Current Study:	Victorian Average	\$51.10

* Australian dollar value calculated on international exchange rates at August 9, 2003

While it is not easy to compare these figures as the study methodologies were not available, the Australian figures are extremely encouraging. Expenditure on day trips is higher than previous overseas studies indicate, which is most likely to be a methodological issue. As noted earlier, many of the 'day trips' were part of a longer trip to the region, particularly for the two more distant trails (East Gippsland and Murray to Mountains). Many of the trails in the international studies are closer to large population centres, such as the Warburton Trail, attracting 'pure' day-trippers.

Furthermore, in a study regarding the impediments to cycle tourism by consultants, EcoGIS (2002), lack of promotion, road conditions and motorist attitudes were identified as major issues. Rail Trails provide an outstanding promotional opportunity for cycle tourism and other trail-based pursuits, due to their specific nature and history, and they are removed from the issues facing road-use, such as road conditions and motorist attitudes.

According to research conducted by Access Economics (2002) for Tourism Victoria, for every \$82,000 spent in regional Victoria, an additional job is created. If the Rail Trails have an overall annual visitation of 200,000 visitor days, the overall economic contribution of \$10,220,000 will create an additional 124.6 jobs. This is a conservative estimate, considering that the sample of 448 respondents spent a total of 824 days on the trails, averaging at 1.84 days each (see the discussion following Table 3.3). To get to 200,000 visitor days, the trails throughout Victoria will need to have a combined visitation of 108,700 annual visitors. There is anecdotal evidence that far greater numbers are already being seen, such as 1,094 visitors on one section of the Murray to Mountains Trail on Easter Sunday, 2002.

These figures are only state averages, and they differ depending on the regional multiplier and leakages, with the injection for each visitor day at each trail noted above.

4.1 Application of the Findings

While every effort has been made to present an accurate economic analysis, a note of warning must be given in that the surveys were undertaken at a time when the more committed trail users were present due to the local devastation from (and continued threat of) bushfires. Nevertheless, the findings can be applied to numerous regional community development scenarios, as well as comparing favourably with the on-line survey.

Rail Trails require initial development such as surfacing parts of the trail, clearing away old railway material and developing directional and interpretational signage. Marketing and promotion are also required, particularly in developing maps and guides. Such seed funding has generally come from local and state economic development sources. However, the trails also require ongoing maintenance, not just on the surface of the trail, but also sign maintenance. In the future, some security issues may need to be addressed, especially if the trails increase in their popularity.

This study has demonstrated not only the economic benefit to a region in terms of direct and induced expenditure, but also job creation. If a community/region is benefiting from the trails, there should be funds available to maintain them. This study is not recommending specific revenue sources, however by looking at the sectors that benefit from the trails, some possible scenarios come to mind. For example, local government may need to commit to maintaining their section of the trail. Due to the number of local shires that some trails pass through, this could be inequitable and subjective, so possibly state government support or a more financially accountable management structure for the trails needs to be considered.

There are some examples of the types of management structures currently in use in the Introduction section of this report, which could also be examined in more detail in light of the results of this study.

The Australian tourism and hospitality industry has generally resisted special taxes, however they do exist in some commercial centres and territories. For example, there is an accommodation tax in the Northern Territory, which is used for tourism promotion. This study demonstrates that certain sectors benefit more than others from Rail Trails, and while further research would need to be done before a case could be presented regarding special fees or taxes, there is some support for such an argument.

4.2 Further Research

This study opens up various avenues for further research into Rail Trails as well as tourism economic studies. The different levels of economic injection found between various sectors in the tourism industry need to be examined further. For example, are these differences across the board for all tourism activities and types of visitor, or do they differ depending on the activities they undertake (such as travelling along a Rail Trail), their demographics or psychographic profiles? Are the regional differences noted in this study consistent with other activities?

In addition, it was briefly noted that there was a significant proportion of solo travellers (11 percent) were using the Rail Trails. Individual travellers are not well catered for by the tourism industry, particularly in terms of accommodation. However, as it appears that people travelling alone is increasing, and that using trails such as Rail Trails is an activity they undertake, a better understanding of their interests and needs is urgently required.

Rail Trails offer enormous economic, social and environmental benefits to the wider community as well as the visitors (and other users) themselves. They need to be supported, but also better understood in terms of what they actually contribute and for whom, as it appears that we may have severely under-estimated their importance.

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APPENDIX ONE: MAP OF RAIL TRAILS IN VICTORIA



Source: Department of Natural Resources and Environment (1999) *Introducing Victoria's Rail Trails*, June 1999, Melbourne

APPENDIX TWO: QUESTIONNAIRE PRO-FORMA

Significance of Rail Trails in Victoria

La Trobe University is undertaking a study of the benefits of Rail Trails in Victoria. If you have recently used a Rail Trail, whether as a local resident, holiday maker or weekend visitor; whether you cycle, walk or horse ride on Rail Trails, your response is vital to this work. The questionnaire should only take a few minutes to complete.

1. Is this the first time you have used a Rail Trail?

☐ YES ☐ NO

If **NO**, how many times would you have used a Rail Trail in the past 12 months (including your current visit)?

2. How did you find about about the Rail Trail which you have recently visited?

3. How did you use the Rail Trail?

☐ Cycling ☐ Walking ☐ Horse Riding ☐ Other (please specify)

If **OTHER**, please specify here

4. Were you travelling independently or on an organised tour?

☐ Independent ☐ Tour

5. How long was your trip on the Trail?

☐ One Day ☐ Two Days ☐ Three Days ☐ Longer (please specify)

If **LONGER**, please specify here Days

6. Where did you stay before and after your trip on the Trail?

At home?

☐ YES ☐ NO

If not at home, which town/s or regions did you stay in?

Before

After

7. Where did you stay while actually using the trail?

☐ Nowhere, we were on a day visit only ☐ See below

Towns or regions we stayed in:

8. What did you spend money on while visiting the trail or visiting the region?

If unsure of actual figures, *please estimate to the nearest dollar*. Please estimate this for your whole travelling group, and include only money spent **IN** the region -- for example, *don't include petrol bought in Melbourne*

8.1 Accommodation

	Town	No of Nights	Overall Cost
Own home	<input type="text"/>	<input type="text"/>	\$ <input type="text"/>
Friends home	<input type="text"/>	<input type="text"/>	\$ <input type="text"/>
Motel	<input type="text"/>	<input type="text"/>	\$ <input type="text"/>
Hotel	<input type="text"/>	<input type="text"/>	\$ <input type="text"/>
B&B	<input type="text"/>	<input type="text"/>	\$ <input type="text"/>
Self catering unit	<input type="text"/>	<input type="text"/>	\$ <input type="text"/>
Caravan park/Camping ground	<input type="text"/>	<input type="text"/>	\$ <input type="text"/>
Bush camping	<input type="text"/>	<input type="text"/>	\$ <input type="text"/>

8.2 Food and Beverages

Overall Cost \$

8.3 Fuel or Public Transport

Overall Cost \$

8.4 Bicycle goods and/or Services

Overall Cost \$

8.5 Other

Please describe Overall Cost \$

9. Number of people in your group

10. Who were your travelling companions?

Please include the number of people in the appropriate boxes

Partner

Family

Friends

Club or Society

11. What gender are you?

☐ Male ☐ Female

12. Which age group are you in?

13. What is your country of residence?

If Australia, please include your post code

14. Which best describes the highest level of education you have ever reached?

☐ Primary/Some Secondary ☐ Completed Secondary ☐ Tertiary

15. Which best describes your job or profession?

- | | | |
|--------------------------------------|---|--|
| <input type="checkbox"/> Home duties | <input type="checkbox"/> Unemployed | <input type="checkbox"/> Administration (eg secretarial, financial administration) |
| <input type="checkbox"/> Student | <input type="checkbox"/> Professional (eg doctor, lawyer) | <input type="checkbox"/> Tradesperson |

Thank for your participation. Your responses are extremely valuable to our research. Please click the "Submit Responses" button below to send this information to our server.

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APPENDIX THREE: DIRECT EXPENDITURE DATA

Overall Expenditure over the Easter Holiday Period by Trail (N=454)

TRAIL	MOTEL	HOTEL	B&B	SELF-CONTAINED	CARAVAN PARK	BUSH CAMPING	FOOD & BEVERAGE	FUEL/TRANSPORT	CYCLING	OTHER	TOTAL EXPENDITURE
Warburton	959	619	1280	0	237	0	9333	661	0	752	13841
Murray to Mountains	6394	3715	3880	7017	10204	800	36190	7052	3353	7735	86340
East Gippsland	986	0	610	780	784	0	5862	1244	3552	1815	15633
TOTAL	8339	4334	5770	7797	11225	800	51385	8957	6905	10302	115814

EXPENDITURE ON EACH TRAIL BY LENGTH OF TRIP AND PER PERSON PER DAY:

Expenditure by Length of Trip

Length of Trip (days)	MOTEL	HOTEL	B&B	SELF-CONTAINED	CARAVAN PARK	BUSH CAMPING	FOOD & BEVERAGE	FUEL/TRANSPORT	CYCLING	OTHER	TOTAL	NO OF RESPONDENTS	PER PERSON PER DAY
1	1923	30	4170	1170	1632	800	20919	3846	4763	3225	42478	300	141.59
2	2779	139	870	0	1822	0	8638	1342	498	1102	17190	54	159.17
3	3109	1625	730	2991	2328	0	9393	1966	870	3781	26793	52	171.75
4	170	0	0	1060	1174	0	2629	571	615	1041	11310	14	201.96
5	0	140	0	1540	1502	0	5776	412	82	384	9836	11	178.84
6	0	0	0	0	1462	0	420	130	0	40	2052	4	85.50
7	0	0	0	136	1055	0	1150	330	0	416	3087	8	55.13
9	0	0	0	0	250	0	250	60	21	100	681	1	75.67
12	0	2400	0	0	0	0	1600	0	0	0	4000	2	166.67
14	358	0	0	900	0	0	610	300	56	213	2437	2	87.04
TOTAL	8339	4334	5770	7797	11225	800	51385	8957	6905	23552	133114	448	132.33

EXPENDITURE ON EACH TRAIL BY LENGTH OF TRIP AND PER PERSON PER DAY:

Expenditure on East Gippsland Rail Trail

Length of Trip (days)														
	MOTEL	HOTEL	B&B	SELF-CONTAINED	CARAVAN PARK	BUSH CAMPING	FOOD & BEVERAGE	FUEL/TRANSPORT	CYCLING	OTHER		TOTAL	NO OF RESPONDENTS	PER PERSON PER DAY
1	662	0	200	0	134	0	3048	854	3452		1290	9640	42	229.52
2	180	0	320	0	160	0	730	240	0		0	1630	5	163.00
3	144	0	90	0	95	0	434	50	10		50	873	3	97.00
4	0	0	0	780	15	0	450	0	90		425	1760	2	220.00
5	0	0	0	0	380	0	1200	100	0		50	1730	2	173.00
TOTAL	986	0	610	780	784	0	5862	1244	3552		1815	15633	54	176.50

Expenditure on Murray to Mountains Rail Trail

Length of Trip (days)														
	MOTEL	HOTEL	B&B	SELF-CONTAINED	CARAVAN PARK	BUSH CAMPING	FOOD & BEVERAGE	FUEL/TRANSPORT	CYCLING	OTHER		TOTAL	NO OF RESPONDENTS	PER PERSON PER DAY
1	1261	30	3040	1170	1394	800	11886	2431	1311		1348	24671	75	328.95
2	1640	60	200	0	1529	0	4960	1002	498		957	10846	27	200.85
3	2965	1085	640	2991	2233	0	8559	1916	860		3711	24960	47	177.02
4	170	0	0	280	1159	0	2179	571	525		616	5500	12	114.58
5	0	140	0	1540	1122	0	4576	312	82		334	8106	9	180.13
6	0	0	0	0	1462	0	420	130	0		40	2052	4	85.50
7	0	0	0	136	1055	0	1150	330	0		416	3087	8	55.13
9	0	0	0	0	250	0	250	60	21		100	681	1	75.67
12	0	2400	0	0	0	0	1600	0	0		0	4000	2	166.67
14	358	0	0	900	0	0	610	300	56		213	2437	2	87.04
TOTAL	8339	4334	5770	7797	11225	800	55435	8957	6905		23552	86340	187	147.15

Expenditure on Warburton Rail Trail

Length of Trip (days)														
	MOTEL	HOTEL	B&B	SELF- CONTAINED	CARAVAN PARK	BUSH CAMPING	FOOD & BEVERAGE	FUEL/ TRANSPORT	CYCLING	OTHER		TOTAL	NO OF RESPONDENTS	PER PERSON PER DAY
1	0	0	930	0	104	0	5985	561	0		587	8167	183	44.63
2	959	79	350	0	133	0	2948	100	0		145	4714	22	107.14
3	0	540	0	0	0	0	400	0	0		20	960	2	160.00
TOTAL	959	619	1280	0	237	0	9333	661	0		752	13841	207	103.92