

CYCLING IN REGIONAL COMMUNITIES:

A LONGITUDINAL STUDY OF THE MURRAY TO THE MOUNTAINS RAIL TRAIL, VICTORIA, AUSTRALIA

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Furthermore, Paul Cheyne's assistance in inputting the data for analysis has been invaluable.

Cover Photo and Competition Winner

The photo on the cover of this report was the winner of a Mongoose Hybrid Crossways bicycle valued at \$649 from Gemini Bicycles for those completing the 2009 Survey and contributing a photo that bests illustrates their Rail Trials experience. There was an excellent and inspirational range of photos to choose from, many featuring family experiences, which are an integral aspect of Rail Trails. Congratulations to Gary Marshall for his photo reproduced on the cover, *Bridges are Great Fun*.

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EXECUTIVE SUMMARY

Rail Trails are multi-user trails sited along disused rail lines, and have been extensively developed throughout Australia. Due to their relatively benign gradients and the trails' differentiation from vehicular roads, these trails have become particularly attractive to recreational cyclists. Many also traverse countryside and small towns extremely attractive to tourists, many of whom have been introduced to cycling through Australia's network of Rail Trails.

This report is the third in a longitudinal study of the impact of these trails on the communities through which they pass, particularly in terms of economic input and increased amenity for all. The study attempts to address a dearth of information relating to cycling, tourism and regional communities in Australia by concentrating not only on an overall economic contribution of a Rail Trail, but also on the host communities through which it travels.

Primary Findings/Recommendations

There is strong evidence from this study that recreational cyclists are a high yield, high spending market, and one that is predominantly highly educated. This segment provides numerous economic and social opportunities for regions such as the MTM Rail Trail, but at the same time must be well serviced. Problems that some faced related to support services on the trail, such as the need for collection services to assist fatigued cyclists and carry luggage. This presents opportunities here to for the development of services to assist.

There is significant support for additional signposted loops extending from the trail, including a link to the Milawa Gourmet region, which reflects the high yield and educational levels of the sample.

Economic Contribution of the Murray to Mountains Rail Trail to the Local Community

As the available data increases and improves, the methods for estimating the economic contribution of tourism continue to be developed. This study has applied indirect inputs as identified via national Tourism Satellite Accounts (TSA) and adjusted to the State level by the Sustainable Tourism Cooperative Research Centre.

In summary, the overall economic contribution of cyclists on the Murray to Mountains Rail Trail to the communities through which it passes is significant. The direct expenditure on various items over the Easter holiday period, 2009 is outlined below.

Average Expenditure, per person per day, 2009

	Accommodation	Food & Beverage	Fuel/ Transport	Cycling	Souvenirs/ Gifts	Other	Total
Dollars	52.00	123.00	18.00	6.50	6.50	38.00	244.00

This compares extremely favourably with the most recent TRA data from 2007, which found that average nightly expenditure in the region to be \$159.00 (TRA, 2008; Tourism Australia, 2008), with Rail Trail Easter visitors spending significantly more than the annual average.

The research findings demonstrate that cycle tourists are high yield visitors, regularly exceeding expenditure in regional areas of other visitors.

Based on the Australian Tourism Satellite Accounts, indirect expenditure is also significant, bringing the overall value of the economic contribution of Easter visitors to the trail to \$447.29 per person, per day.

This study is part of a wider Rail Trails study undertaken in Easter 2009, however the primary Trail for the research was the Murray to Mountains Rail Trail. A further report on the other Trails will be presented as it becomes available.

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INTRODUCTION

Along with many rural communities around the world, Regional Victoria has faced continued economic, social and environmental challenges. Tourism is often touted as a 'saviour', and there are many instances where tourism has provided jobs, increased pride and rescued failing regional communities (Beeton, 2006).

Rail Trails are multi-user trails sited along disused rail lines, and have been extensively developed throughout Australia. Due to their relatively benign gradients and the trails' differentiation from vehicular roads, these trails have become particularly attractive to recreational cyclists. Many also traverse countryside and small towns extremely attractive to tourists, many of whom have been introduced to cycling through Australia's network of Rail Trails.

This report is the third in a longitudinal study of the impact of these trails on the communities through which they pass, particularly in terms of economic input and increased amenity for all. As noted in the Conclusion of the 2006 Report,

Rail Trails provide outstanding opportunities for tourism and recreation, and can encourage outdoor activities and exercise due to the relatively gentle nature of the gradients and the attractive places many pass through. They also provide economic opportunities for the local host communities as well as the increased pride 'showing your place' to visitors creates. (Beeton, 2006: 20)

Longitudinal studies are rare, due to the costs involved in sustaining research over a period of time and changing methodologies, as well as the problem of sustaining the interest of the various parties involved and changes in personnel. However, since the initial study in 2003, it has become clear that it is essential we understand the trends, benefits and issues relating to Rail Trails. This is also reflected in the conclusion of the aforementioned 2006 Report, which calls for "local businesses and communities ... to proactively develop, manage and promote the trails to their markets." (Beeton, 2006:20). Consequently, we have tried to be as consistent as possible over the past six years of research, while at the same time not neglecting developments in methodological approaches. The most significant change in the methodology has been the shift in attitudes from economists away from applying multipliers towards more complex approaches towards identifying indirect economic input. This study has applied aspects of the 'newer' approach in its economic analysis by utilising data from the Tourism Satellite Accounts, and applying it to the previous studies as well as this one.

In addition, each time that the survey has been conducted there have been external circumstances potentially influencing the findings, as with any tourism research. The region has experienced direct bushfires (2003), bushfires in other regions (2006) as well as weather issues such as ongoing drought, yet there was a relatively high degree of rain during Easter in 2009.

Structure of the Report

Following is a summary of the literature most relevant to this study; however it needs to be noted that limited new relevant work has been done in the specific area of Rail Trails since the 2006 study, so much of this summary has been drawn from previous literature reviews. The summary includes a table citing various studies that have looked at the economic contribution of Rail Trails to local communities, which once again includes limited 'new' work, apart from our own studies. Economic studies have been undertaken on cycling and trails, but not on Rail Trails per se, which are significantly different to other cycling trails, in their purpose and style. Following this brief summary, the study region is described along with the reasons for using it, followed by the research approach and a description of the sample. The results of the study are then presented and compared with the previous two studies in order to ascertain any trends that may be emerging. Areas of particular interest are reiterated in a brief recommendations section, however, readers are encouraged to consider the data presented and utilize it themselves.

A Summary of Relevant Research in Rail Trails and Cycle Tourism

There are few studies in the public domain relating to economic inputs and tourism demand in relation to Rail Trails, requiring groups interested in developing Rail Trails to undertake their own research, which is not always practical or possible. Searching the Internet provides numerous 'reports', but most are over ten years old, relate to other parts of the world (so may not be directly transferrable to Australia) and the data is often unsubstantiated. Even when available and potentially relevant, studies on the significance of cycling rarely consider this in terms of tourism. Supporting this, Krizek (2006), in a summary the cycling research in Europe and the US, noted six basic themes: mobility (transport), health; safety; decreased externalities and congestion, livability, fiscal; with no mention of tourism or its economic benefits.

The Cooperative Research Centre for Sustainable Tourism (STCRC) has undertaken some projects relating to Cycle Tourism, primarily as scoping studies and to develop a typology of cycle tourists (see Faulks, Ritchie and Fluker, 2007; Faulks, Ritchie, Brown and Beeton, 2008). These studies, while contributing to our understanding of cycle tourism, did not focus on the host (or local) communities and the concomitant effects cycle tourism (and Rail Trails) may have. Cycle Tourism Australia has also been working on a better understanding of the concept of tourism in relation to cycling, and has undertaken a number of projects, but once again they do not cover the aspects that apply to this research.

In a relatively recently published study, Bowker, Bergstrom and Gill (2007) published a paper relating to a 2003/4 study of the economic impact of the Virginia Creeper Rail Trail in the USA. They found that overnight visitors contributed an average of US\$82.10 per day, with an aggregate benefit of between US\$2.3 million and US\$3.9 million, concluding that "...promoting trail-related recreation and tourism appears to be a viable strategy for increasing economic growth in a local community" (Bowker et al, 2007: 257).

A summary of the reported economic contribution of cycling trails around the world is presented in Table 1, including the 2003 and 2006 studies.

Table 1 International Comparison of Economic Contribution of Cycling Trails

Country	Study	Average per Day in Aust \$*
USA	<i>National Park Service (NPS):</i>	
	Iowa	10.60
	Florida	12.68
	California (urban)	4.57
1999	<i>Ohio-Kentucky-Indiana Regional Council:</i>	
	Miami	15.59
2001	<i>Maine Report:</i>	
	Self-guided	63.31
	Tours	132.38
EUROPE	<i>England National Study:</i>	
	Day trips	16.86
1999	Overnight Trips	274.46
1996	<i>UK Cycle Paths Survey:</i>	
	Day Trips	13.64
	Holiday makers	45.96
1998	<i>Switzerland Cycling Routes:</i>	
	Day Trips	32.44
	Holiday makers	135.36
AUSTRALIA		
2003 Study**	East Gippsland Rail Trail	176.50
	Murray to Mountains Rail Trail	112.99
	Warburton Rail Trail	103.92
2006 Study**	Murray to Mountains Rail Trail	258.00

* Australian dollar value calculated on international exchange rates at September 20, 2009 (resulting in lower US\$ and GBP values)

** Regional multipliers removed for future comparative purposes (see Economic Contribution Section)

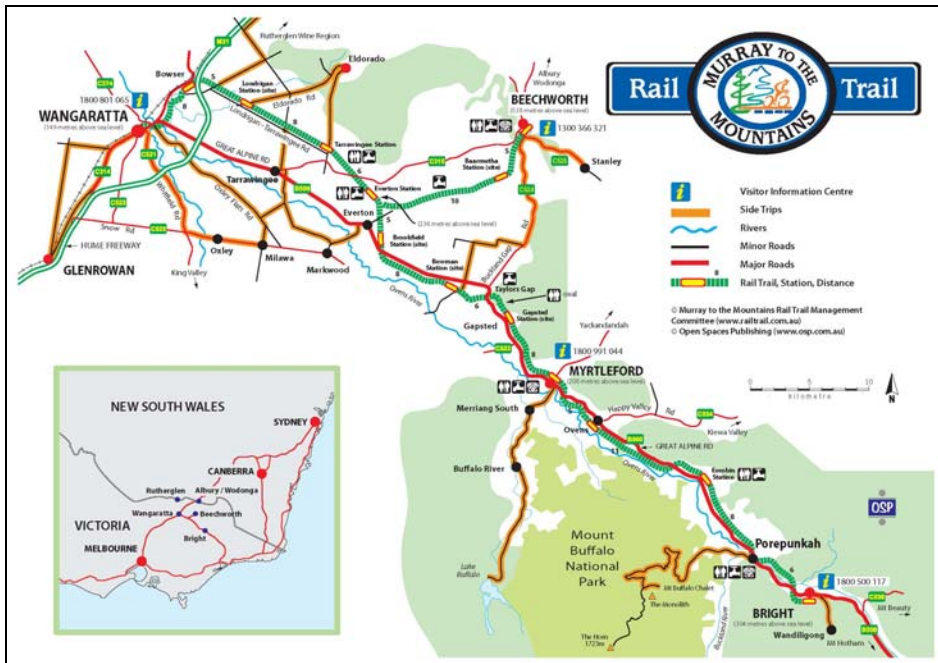
Adapted from: Beeton, 2003a; 2006

This longitudinal study is one attempt to address this perceived dearth of information relating to cycling, tourism and regional communities in Australia by concentrating not only on an overall economic contribution of a Rail Trail, but also on the host communities through which it travels.

The Study Region: Murray to the Mountains Rail Trail (MTM)

In 1997, the north-east Victorian shires of Alpine and Indigo combined with the Rural City of Wangaratta to propose to convert the disused railways between the three townships of Wangaratta, Bright and Beechworth into an historic based Rail Trail connecting a series of small heritage towns (Beeton, 2009). The rationale behind the proposal focused on the tourism potential of such a trail in developing the region both economically and socially, arguing that “[t]he rail trail would establish a nationally significant tourism product, link existing tourist attractions and preserve magnificent historical structures along the route” (Rail Trails Australia, 2006).

Figure 1. Murray to the Mountains Rail Trail



Source: Murray to Mountains Rail Trail, 2008

The Murray to the Mountains Rail Trail (MTM) links the townships of Wangaratta, Beechworth, Myrtleford, Porepunkah and Bright, each with their own heritage tourism appeal, as well providing an introduction and access to the nearby High Country. Following historical railway lines, the Murray to the Mountains Rail Trail provides 94km of sealed bitumen track available for walkers, horse riders and cyclists. However, due to its relatively benign gradient and the quality of the trail such as the hardened surface, along with associated services for cyclists, recreational cycling is the primary activity on the Rail Trail (Beeton, 2006).

METHODOLOGY AND RESEARCH SAMPLE

In order to maintain some consistency in the research, a self-completion questionnaire was designed based on the 2003 and 2006 surveys, relating again to the Australian Easter school and public holiday period. Due to the development of our understanding of Rail Trails and cycle tourism, additional questions were included that cover cycling use and experience, motivation and travel patterns on the trail as well as levels of satisfaction.

The questionnaire was made available online at Bicycle Victoria's (BV) website using the software package SurveyMonkey, with fliers being distributed around the MTM trail as well as via BV's membership list. A copy of the flier is below:

Figure 2: Research Flier



The project obtained approval from La Trobe University's Ethics Committee (Approval Number 09/09R). This study expanded the survey site into other Rail Trails (as with the 2003 survey), however this report focuses specifically on the MTM Rail Trail, as this is the one on which we have been gathering longitudinal data. The results from the broader study will be reported separately.

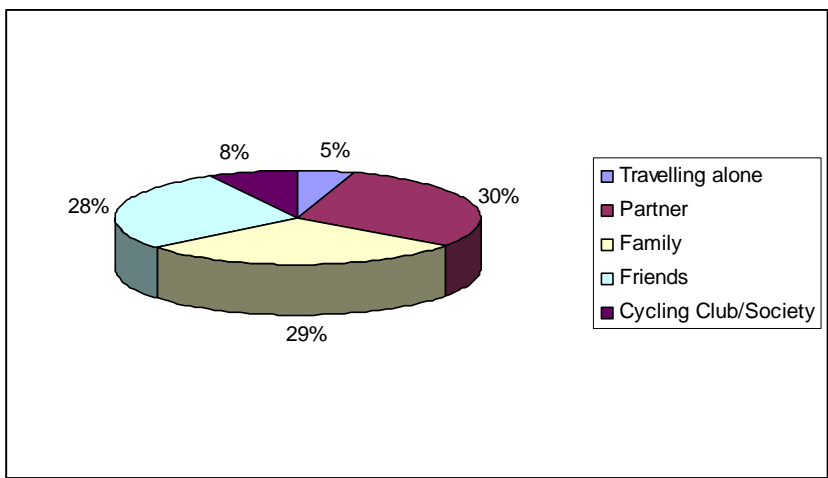
Sample Description

The number of respondents for the MTM study was 137, with 128 usable responses, which compares favourably with the 2006 study which had 140 respondents and slightly less than the 2003 study of 189 responses. Unfortunately, there are no overall statistics for the number of people on the Rail Trail during the study period of Easter, 2009, which has in the past been supplied by track counters used by the trail management group. However, this number of responses does represent a reasonable proportion of visitors, as a high majority travelled in groups. Once their number of travelling companions was extrapolated, the total number of Rail Trail participants in the study came to 686, comparing favourably with the 2006 overall size of 625.

A question not addressed in the past was whether the respondents were locals or visitors, as there was an assumption (and minor limitation) that all people on the MTM Rail Trail at Easter were visitors. Whilst this may seem to be a rather strong assumption, in actual fact, of the 128, only 22 identified themselves as living close to the Rail Trail but were all travelling with visitors. Travel companions were evenly spread between travelling with a partner, family or friends, while only a small number of respondents (5 percent) travelled alone, as shown in Figure 3.

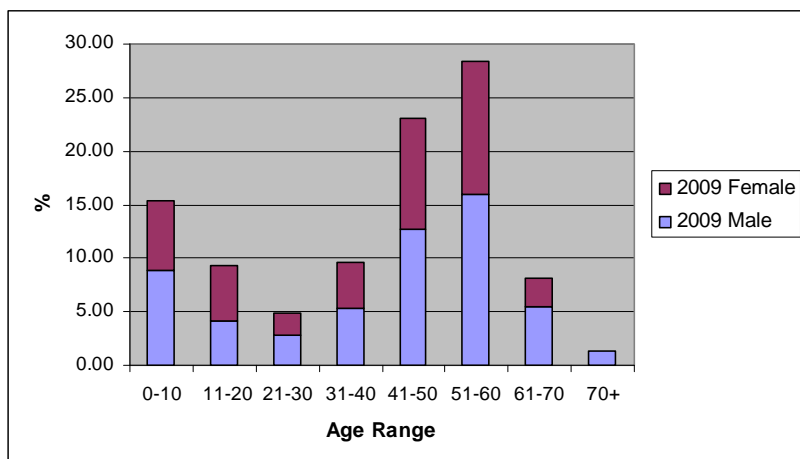
It is something you can do as a family...

Figure 3. Travel Companions



The respondents were predominantly employed in professional and administrative positions (47 and 25 percent respectively) with 14 percent retired; however no respondents identified themselves as unemployed. This indicates a group with a potentially high level of disposable income. Ages were varied, ranging from one year old to 79, with a slight majority of men (53%) as shown in Figure 4. The largest group was aged between 41 and 60 years old, however the high representation of riders in the 0-10 age groups illustrates the significance of mixed family groups and the suitability of the Rail Trail for all ages.

Figure 4. Age and Gender of Cyclists on the Trail



Half of the respondents had past experience in using Rail Trails and identified the MTM Trail as one they had visited previously. Over half (53%) considered themselves to be frequent riders, cycling more than once a week, but not daily. The next largest group (23%) were regular weekly riders, suggesting that while the trail is being used by people who cycle often, they are primarily recreational cyclists with a quarter who do not cycle regularly. This group may have the potential to become more regular cyclists, or may simply remain a ‘holiday’ cyclist.

As with previous studies, the majority of visitors came from Victoria and neighbouring New South Wales, with no international visitors represented in the sample. Overall, regional Victoria does not attract significant numbers of international visitors, with 93 percent of overnight visitors to the region in 2007 (the most recent regional data) being domestic (TRA, 2008).

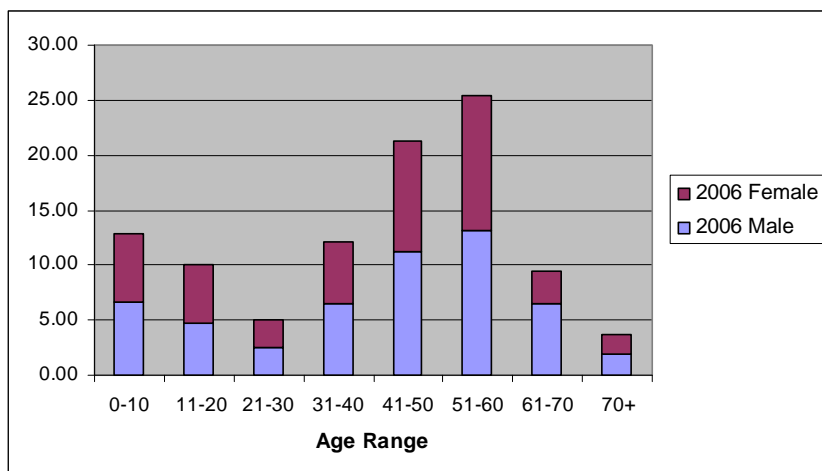
Table 2. Origin of Visitors

Place	Percentage
Victoria	80
Melbourne	46
Regional Vic	34
New South Wales	14
Sydney	6
Regional NSW	8
ACT (Canberra)	3
Other Australia	3

Comparison to Past Studies

As anticipated, there have not been any significant discrepancies between the sample in this study and previous studies, with a slightly higher proportion of men to women cycling on the Trail, and a dominance of professionally employed participants. The distribution of age and gender in this study compared with the 2006 study is comparable, as illustrated by the proportional gender and ages from 2006 in Figure 5.

Figure 5. Age and Gender of Cyclists on the Trail, Easter 2006



This enables appropriate comparisons to be made across the past six years, triangulating and supporting the methodology.

Limitations

This study has used convenience sampling rather than random sampling, so there will be some assumptions that are not clear-cut. However, as the study is about those who have participated in cycling on the MTM Trail, a simple random sampling would not have been efficient or appropriate. By comparing data over a longitudinal period, we are able to isolate changes due to the fact that the sampling method has remained primarily consistent with each study. In addition, the use of an online survey instrument will exclude some users, however the comparability of response rates and samples with previous studies, where mail-back questionnaires were used, indicates that this has not been an issue.

The sole focus on cyclists on the Rail Trail provides a potential skewing of the results as the trails were originally developed as multi-use trails for walkers and horse riders as well as cyclists. That said, as noted earlier, the primary users amongst visitors are cyclists, consequently the focus here has been on that activity.

Finally, there are always issues regarding the self-reporting nature of self-completion questionnaires. This is particularly the case in relation to economic data – people are often vague and at times resistant towards accurately reporting expenditure. For example, in the 2006 study one respondent simply replied “lots” in response to the expenditure questions. Due to time and financial issues of data collection, self-completion questionnaires were deemed as the most appropriate approach, but the results should be used with caution – according to some anecdotal evidence and direct communications with trail cyclists, they could be even higher.

By comparing levels of expenditure over the years, rather than purely focusing on the dollar values, trends can be identified. It is believed that this is a more reasonable approach.

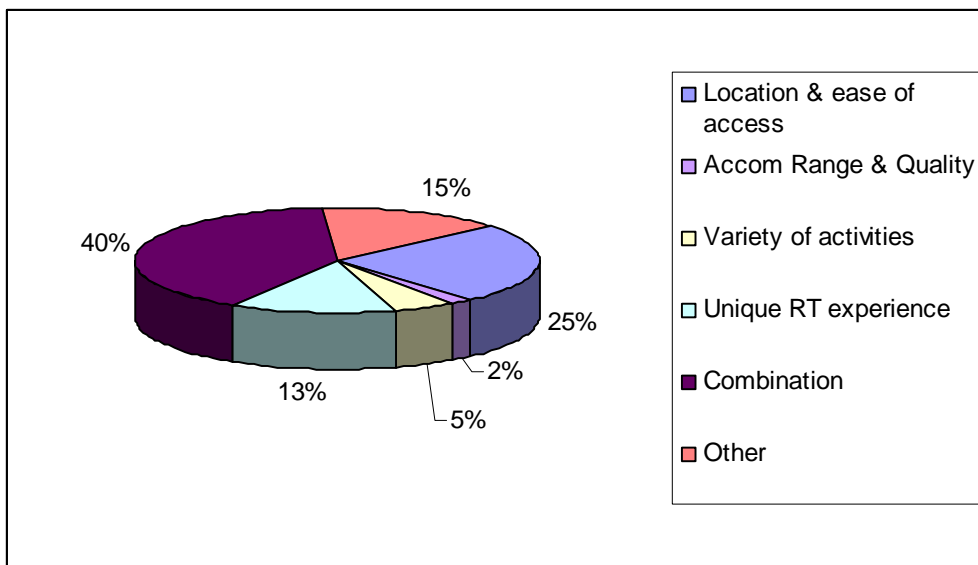
RESULTS OF THE STUDY

Motivation of Cyclists to Experience the MTM Rail Trail

As in previous studies, a high percentage of respondents (63 percent) came to the MTM region primarily to cycle, finding out about the trail from friends (34 percent) and having prior knowledge of the region (37 percent). The Internet (20 percent), other media and local residents make up the remainder, with Internet usage presenting the most interesting finding. In the 2003 study, only two percent of respondents using the Internet, consequently there has been a significant shift in the use, availability and range of information sources. The Murray to Mountains region has an extensive web site with information on the Rail Trail and other cycling opportunities, which is being used by a growing population of visitors.

The reasons for choosing the MTM trail as their holiday destination centered around the area's location and ease of access, as illustrated in Figure 6.

Figure 6. Reasons for Choosing the MTM Trail



As expected, a high level of respondents (all but one!) agreed that bike riding is becoming more popular, with the most common responses as to 'why' being the increased interest in health and fitness, concern for the environment improved facilities, infrastructure and trails.

Lovely outdoor activity to get fit...

Previous research found that more people would participate in Rail Trail activities if there were better facilities and infrastructure for cyclists. The following comments from respondents reflect a change:

- *there are more facilities...*
- *better facilities & greater awareness...*
- *better tracks/trails with facilities...*
- *better facilities than previously...*
- *improved riding opportunities...*
- *improved facilities...*

The positive comments relating to the issue of facilities and infrastructure in this survey is testament to the work being done by many regions to support cycle tourism, but particularly those involved with the MTM Rail Trail.

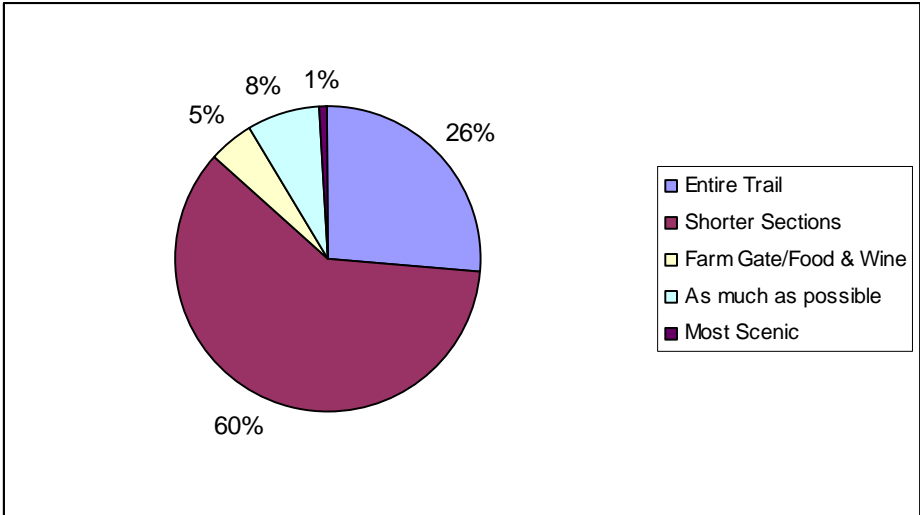
Furthermore, many also cited the social and financial benefits of cycling, as indicated by the following quote:

Affordable & healthy activity, social side to it...

Cycling and Trail Usage

Over 90 percent of respondents were staying in the Region for the Easter holiday period (Friday through to Monday) or longer. The Easter period coincides with school holidays and is traditionally a time of great Autumnal beauty in the North East of Victoria; as 40 percent of respondents travelling with their families, it is understandable that a number are staying longer.

Figure 7. Extent of Trail Cycled



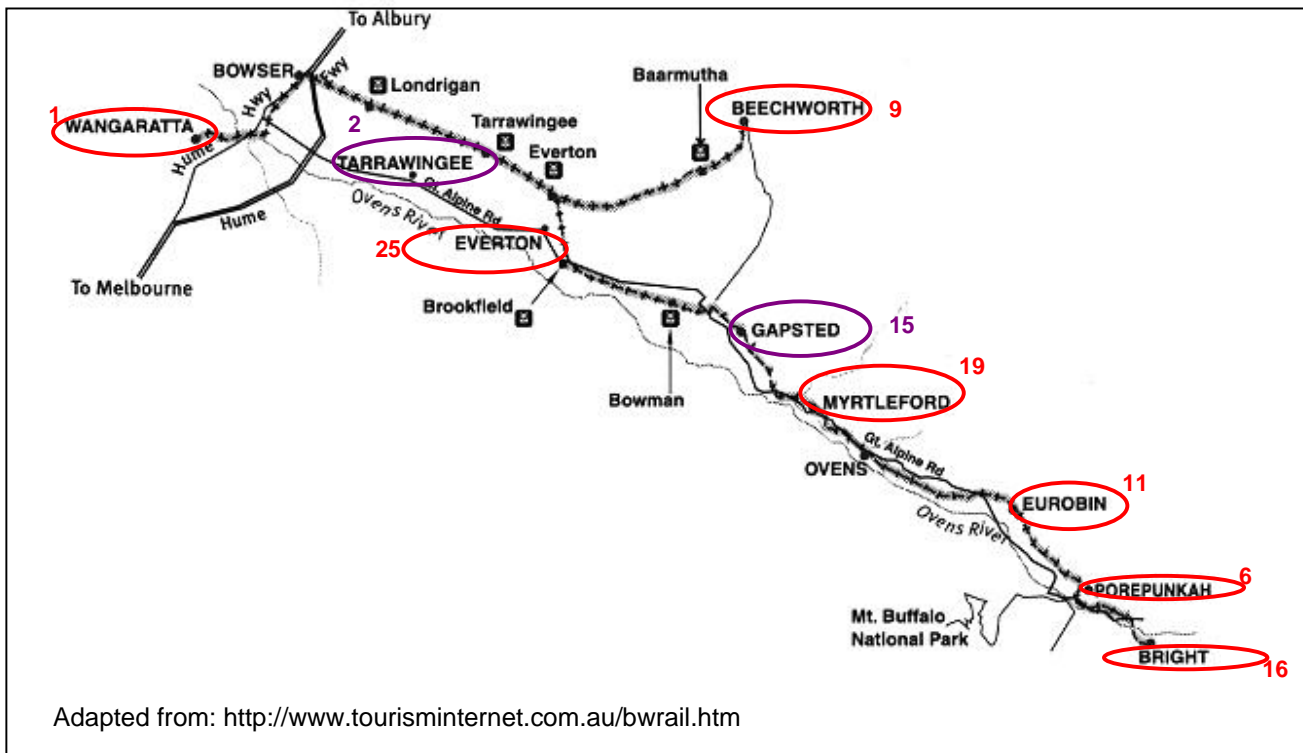
Just over half of the respondents felt comfortable riding between 41 and 80 km per day, with a further 22 percent nominating 21 to 40 km. This information is important when developing trails and stop-over opportunities. The

MTM trail provides a range of stop-over options within the 21 to 80 km range, with station/rest stops on the trail every six to eight km.

Great asset to the region - easy for anyone

In 2006, the range of overnight stops focused more on the main towns of Wangaratta and Bright, with some spread amongst the towns on the trail, particularly Beechworth. Three years later, the spread is much broader, with fewer groups staying in the main towns, including two 'new' places on the trail being used as overnight stops, Gapstead and Tarrawingee, as shown in Figure 8.

Figure 8. Total Overnight Stops on the Trail for Cycling Groups (number)



Two respondents noted that they stayed at Harrietville which, being 'off the trail', was not included in the survey. However, it is important to note that Rail Trail cyclists do stay in other regional towns, and that the economic and social benefits extend to this wider regional community.

The Experience

The rating of various aspects of the respondents' experience is positive, with 86 percent rating the car-free cycling experience as 'great'. This is not surprising, but does underline the importance of having cycling trails separate from motor vehicles. Table 3 summarises the ratings on a scale of 1 to 5.

You get to see places you may not normally have seen...

Table 3. Rating Average for Aspects of the Experience

	Average Rating (scale of 1-5)
The Trail itself	4.63
Food and/or wine	4.43
Quality & range of accommodation	4.22
Scenery & wildlife	4.56
Towns along the trail	4.52
Car-free cycling experience	4.85

While the overall experience was positive, some difficulties were experienced by visitors to the trail. This was an open-ended question, with 24 respondents making some comment. The more typical comments included tired children and some weather issues:

- *Children got tired*
- *poor equipment, especially with inexperienced riders and kids*
- *Only bad weather. Rain ALL day*
- *Some minor problems having to carry our luggage.*
- *navigation failure when we suddenly found ourselves on a dirt rocky road*
- *Over doing it physically. Due to the 140 Km's in the one day*

Related to some of the reported difficulties was the final question of the survey that asked what aspects of the trail need to be focused on in terms of further development. Over half wanted signposted loops from the trail, with almost three quarters (73 percent) wanting the link to the Milawa Gourmet region developed. Connecting the trail to the Murray River also rated highly (58 percent). It is these three areas that the destination managers and local governments need to prioritise.

When respondents were asked to nominate which trail was 'next on their list' to cycle, 89 responded, and while fourteen of whom were not sure, or needed to do more research, the high number of respondents who were able to identify their next Rail Trail experience was impressive. Their plans ranged from the Barossa in South Australia through to the Otago Rail Trail in New Zealand, with the most oft-cited trails being (East) Gippsland and the Warburton Rail Trails, while a number planned to return and spend more time exploring the MTM trail and environs. What was interesting with these open-ended responses was the high awareness of Rail Trails (especially in Victoria), and interest in exploring them.

Accommodation

Overall accommodation use in the region for 2007 (the most recent official regional data) found that staying with family/friends were the highest (approx 36%) with caravan/camping and hotel/motel/apartment having the same proportion at 32% each (TRA, 2008). When we look at the accommodation used by Rail Trail participants at Easter, 2009 in Table 4, there is a higher percentage staying in hotel/motel/apartments (35 percent), 53% camping and in caravan parks, and fewer with friends and relatives with a low 6 percent. This suggests that we may see higher accommodation expenditure in the region with the study group than the region overall, underlying a point made in previous studies, that recreational cyclists are a high yield market.

Table 4. Type of Accommodation

	Thursday	Friday	Saturday	Sunday	Monday	Total	% 2009	% 2006
Hotel/Motel	4	17	13	12	6	52	17	11
B&B/Guest House	3	7	7	6	2	25	8	5
House/Apartment/Cabin	4	6	7	7	5	29	10	6
Caravan Park	22	23	23	23	15	106	35	30
Camping	5	6	6	6	3	26	8	23
Backpackers	0	1	1	1	0	3	1	1
Own Home	2	6	6	7	5	26	8	12
Family/Friends	4	5	5	5	2	21	7	9
Other	2	2	3	3	3	13	4	2

In addition, a significantly lower percentage of respondents in 2009 stayed in caravan or camping grounds than in 2006, being 43 and 53 percent respectively, with more staying in hotel/motel/guest houses/apartments (35% in 2009 vs 22% in 2006). This result may reflect the poor weather experienced in 2009, or a shift towards using a higher quality of accommodation. It is most likely a combination of both.

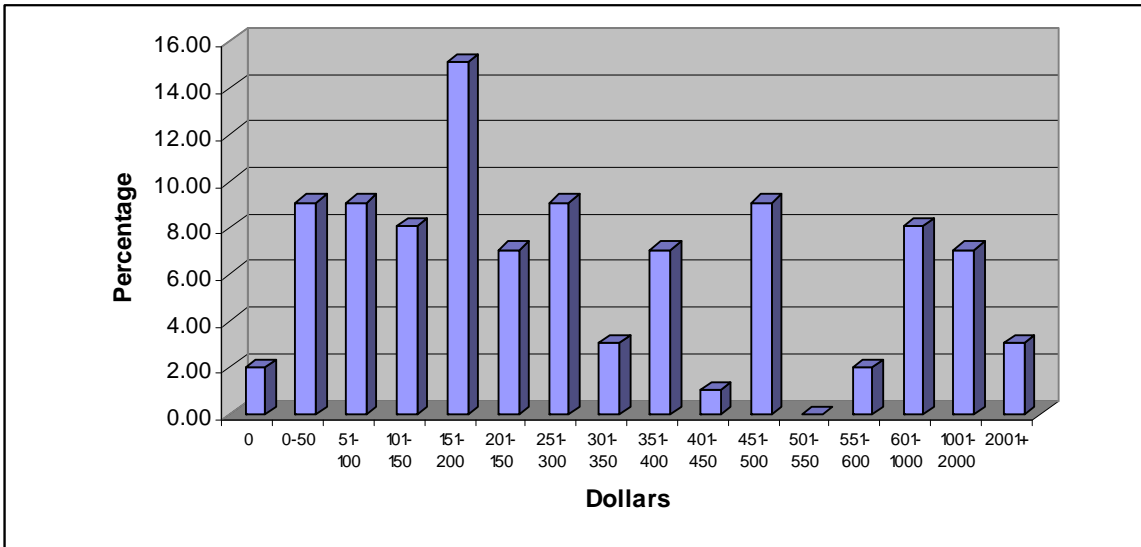
Overall Trip Expenditure

As noted in the Limitations section, asking people to recall and relate their expenditure is problematic. Even with the best will to report this area honestly, many people mis-represent their expenses, often down-grading them. However, the data is relatively consistent with previous studies, so we are confident that the data is sound and that expenditure has stabilised.

For such a small cost it has delivered a great return!

As with previous studies, the highest area of expenditure was on food and beverages, which was in the region ranged from zero up to \$700, with the majority of expenditure around the \$150-\$250 range. This overall figure does not drill down to individual expenditure at this stage, however the spread of expenditure provides some useful data.

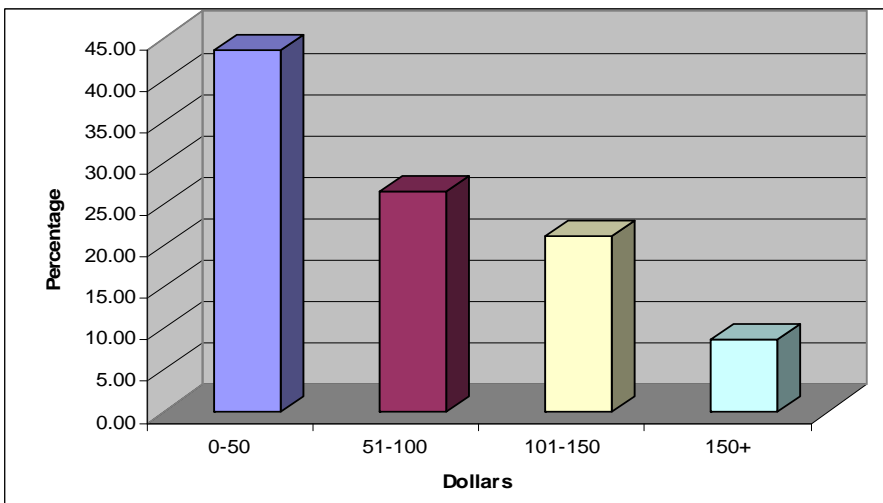
Figure 9. Overall Food and Beverage Expenditure



There is anecdotal evidence that a significant element of food and beverage expenditure includes wine purchased in the region. Also, considering that Gapstead, which boasts an award-winning winery that backs directly on to the Rail Trail, has featured as a ‘new’ overnight stop-over.

The most consistent cost item was accommodation, with most parties staying in paid accommodation, as noted above. While this average is lower than food and beverage expenditure, accommodation remains significant, as it also helps explain the food and beverage costs. When we consider the level of ‘self catering’ accommodation used in the region, such as caravan parks, such costs are logical. However, it does indicate that visitors to the region may be considered ‘budget’ in terms of their accommodation preferences, but then spend significantly on food and beverage. The reported accommodation costs and proportion of each price range are illustrated in Figure 10 below.

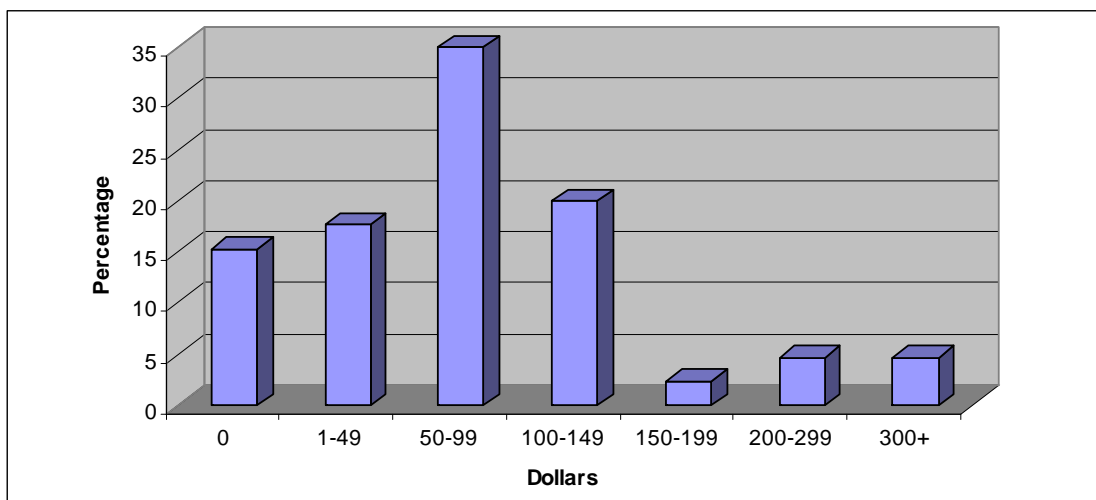
Figure 10. Overall Accommodation Expenditure



However, as many participants stayed in lower cost accommodation such as caravan parks and camping, the overall expenditure is not as high as other areas, such as food and beverage. Consequently, the average daily expenditure is around \$52.00 (see Table 5 Average Expenditure, per person per day, 2009).

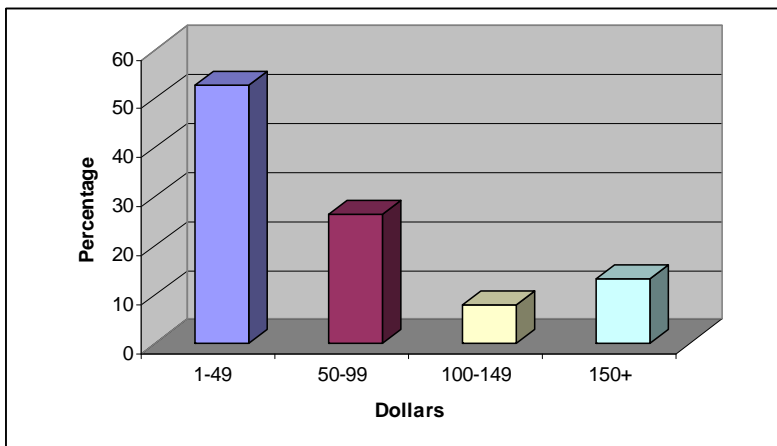
A high proportion of respondents did not spend on fuel or transport while in the region, which is to be expected as they were involved in cycling, which is a means to move around the region via the Rail Trail. What was more surprising was that a significant number spent between \$50 and \$150 on fuel and transport.

Figure 11. Overall Fuel and Transport Expenditure in the Region



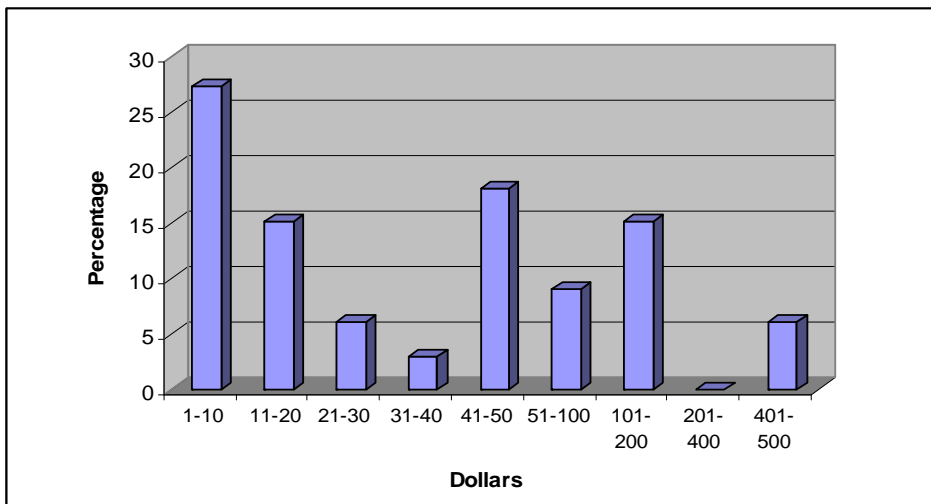
As noted earlier (and throughout this report), cycling is the primary focus of the participants in this survey. Since the first study in 2003, there has been a growth in the number and type of cycling support businesses in the region, particularly specialist cycling stores in Wangaratta, Beechworth and Bright. While most visitors would not intend to purchase bicycle goods and services while on such a trip, over one quarter of the sample did so as indicated below.

Figure 12. Overall Expenditure on Bicycle Goods and/or Services (N=38)



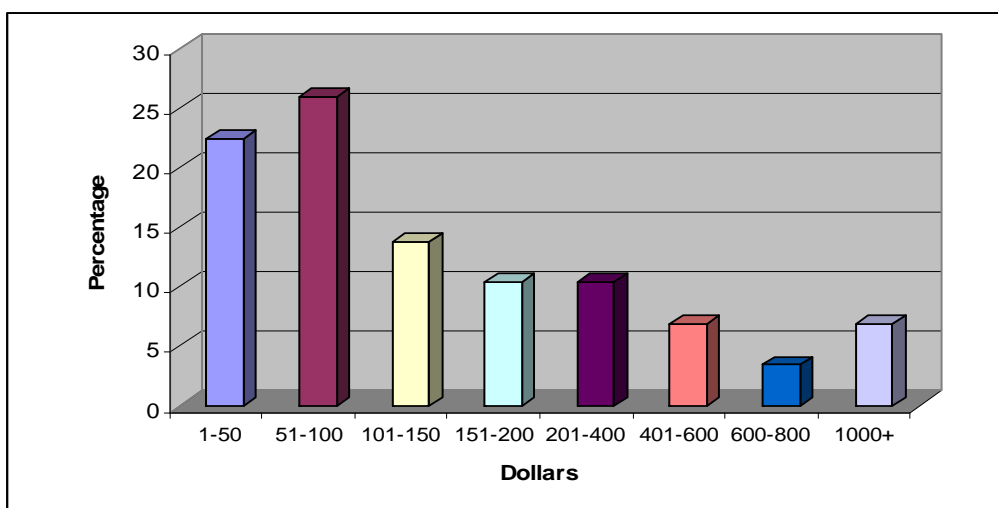
A significant proportion of the expenditure was under \$50, which indicates the purchase of small items that may have been forgotten to be included in the trip or others that are minor and were deemed easier to purchase in situ. Two respondents spend around \$300 and a further respondent \$400, which certainly demonstrates the willingness of some visitors to spend quite highly on cycling goods and services while on holiday.

Figure 13. Overall Expenditure on Gifts and Souvenirs



Other expenditure included souvenirs and gifts, where around 30 respondents spent up to \$500, with the mean coming in at around \$37 per day. However, a few participants (four) spent over \$1,000, which cannot be included in any of the more common categories such as food and beverages, gifts etc. Interviews would be the only way to find out what this expenditure entailed, which was not possible due to the anonymous nature of the data.

Figure 14. Overall Expenditure on Other Items



Economic Contribution to the Local Community

All the questions relating to expenditure were clearly presented as relating to expenditure while in the MTM region, not costs incurred prior to (or after) the visit, such as filling the car with fuel prior to leaving home. As with previous surveys, much of the data reported above has been for the groups of people travelling; however it is possible to estimate the average expenditure by individuals by cross-tabulating those who responded to the financial questions with the travel group numbers. While this remains an estimate, it can be used to compare expenditure patterns with the previous 2003 and 2006 studies. As noted in previous reports, averages are overall higher than the 'means' suggested in the preceding graphs due to some higher 'outliers' at the top end. It was decided in the 2003 study to include such outliers as they represent a small, but consistent and significant higher spending sector that should be counted in the data.

Table 5. Average Expenditure on the MTM Rail Trail, per person per day, 2009

	Accommodation	Food & Beverage	Fuel/ Transport	Cycling	Souvenirs/ Gifts	Other	Total
Dollars	52.00	123.00	18.00	6.50	6.50	38.00	244.00

The expenditure outlined in Table 5 above compares favourably with the most recent TRA data from 2007, which found that average nightly expenditure in the region to be \$159.00 (TRA, 2008; Tourism Australia, 2008), with Rail Trail Easter visitors spending significantly more than the annual average, reaffirming earlier statements regarding the higher yield propensity of cycle tourists.

Comparison with Previous Studies

Differences in the accommodation expenditure has been explained due to the shift from a predominance of caravan and camping towards hotel, motel, guest house and apartment accommodation. Whilst the weather may have had some influence (as stated earlier), there has been an increase in the range of accommodation available on and near the trail, especially at Gapstead, which has shown up as a 'new' overnight stop.

Table 6. Average Direct Expenditure on the MTM Rail Trail, 2003, 2006, 2009

	Accommodation	Food & Beverage	Fuel/ Transport	Cycling	Souvenirs/ Gifts	Other	Total
2003	22.00	60.33	11.77	7.01	n/a	11.88	112.99#
2006	27.00	147.00	47.00	10.00	n/a	27.00	258.00#
2009	52.00	123.00	18.00	6.50	6.50	38.00	244.00

In order provide comparable data, the multipliers applied in previous years have been removed.

Another point of comparative interest is the expenditure on fuel and transport. Fuel and transport in the region is significantly lower than the 2006 study, yet fuel costs have increased. As respondents were asked to only report on expenditure in the region, it can be assumed that they are leaving their vehicles (if they travelled by car) once they arrive and using their bicycles as their primary form of transport around the region. This is a reasonable assumption, as there is little if any public transport within the study area, particularly over the Easter holiday period.

Unfortunately, without overall visitor numbers on the MTM Rail Trail over the period of this study, it is not possible to provide an estimate of the total value of the Trail to the region.

Indirect Effects

Of particular interest to the region is to understand the level of the economic contribution in terms of indirect expenditure, where the money spent in the region ‘trickles down’ throughout the community via successive rounds of spending. Previously, multipliers have been developed from Input-Output analysis and then applied to the direct expenditure. However, many economists now agree that accurately estimating multipliers is problematic, particularly for a small region such as that considered by the MTM Rail Trail. As noted by Access Economics, “To measure indirect value added requires the tourism expenditure on each item to be traced to each input used in its production, and the inputs used to create these inputs, and so on.” (Access Economics, 2005: 31).

Furthermore, taking a simple ‘multiplying’ approach developed solely through Input-Output analysis does not take in to account opportunity costs where the money spent on tourism may have been spent elsewhere in the economy, nor costs of production (Dwyer et al, 2004).

Using data from the National Accounts and extracting the tourism component from each sector, the Australian Bureau of Statistics (ABS) released the first Tourism Satellite Account (TSA) for Australia in 2000. This enabled a more accurate assessment of the contribution of tourism to the broader Australian economy. The Sustainable Tourism Cooperative Research Centre (STCRC) Centre for Economics and Policy followed the same structure to develop TSAs for each state and territory. In order to deal with the complexities of tourism, differences between states and territories and the issues with purely taking a top down approach, the researchers included bottom-up analysis (Ho et al, 2008).

Table 7 summarises the estimates of tourism’s contribution to the Victorian economy, including indirect inputs of Tourism Gross Value Added (GVA), tourism net taxes, tourism Gross State Product (GSP), tourism Gross Domestic Product (GDP) and tourism employment. From this data, it is possible to extrapolate a value-added ratio and approximate the total contribution of MTM Rail Trail visitors to the region.

Table 7. Estimates of the Economic Contribution of Tourism in Victoria, 2006–07

	Direct Contribution (DC)	Indirect Contribution (IC)	Total Contribution	Share of Direct in Total (SDC)
Tourism GVA (\$m)	6905.29	6523.68	13428.98	51.42
Tourism net taxes on products (\$m)	1343.98	349.66	1693.64	79.35
Total	8249.28	6873.34	15122.61	54.55
Tourism employment ('000)	102.18	77.07	179.25	57.00

Source: STCRC, 2008

A simple formula to estimate the total dollar contribution based on the data provided above can be derived ($DC/SDC \times 100$) and applied to Table 8 below. However, as this is based on statewide data, when bringing this down to a small regional level, the findings need to be used with caution.

Table 8. Economic Contribution of Visitors to the MTM Rail Trail, 2003, 2006, 2009, per person per day

	Direct	Indirect	Total
2003	112.99	94.14	207.13
2006	258.00	214.96	472.96
2009	244.00	203.29	447.29

Based on the TSA Victorian data outlined in Table 7 for every \$100,000 in Total Contribution (which includes direct and indirect expenditure), 11.85 equivalent full time jobs are supported. In other words, 11.85 jobs are supported by \$54,500 in Direct Expenditure in the MTM Rail Trail region. Without a total dollar value of the Trail (as discussed previously), it is not possible to take this analysis further, however it is clear that visitors to the MTM Rail Trail support a significant proportion of regional employment.

CONCLUSION AND RECOMMENDATIONS

The points below briefly cover some selected findings from the study; however the data presented in this report is extremely rich, and readers are encouraged to take the time to consider it in terms of their own businesses and interests and utilise it.

Business and Trail Development Opportunities

There is strong evidence from this study that recreational cyclists are a high yield, high spending market, and one that is predominantly highly educated. This segment provides numerous economic and social opportunities for regions such as the MTM Rail Trail, but at the same time must be well serviced.

A problem that some faced was that of members of their group tiring on the trail, especially the younger ones. There were also numerous comments about problems with carrying luggage and some issues due to cycling in the rain. The only comment about existing 'pick up' support services is that they are costly. Such issues provide opportunities here to for the development of services to assist, to which we strongly recommend further consideration be given.

There is significant support for additional signposted loops extending from the trail, including a link to the Milawa Gourmet region. When we consider the amount spent on food and beverages by cyclists over Easter, such a link should be a high priority.

Promotion

The Internet is gaining in importance in terms of providing initial information, maps and track condition data. This needs to be built on, with consideration being given to the use of new forms of communication (especially via mobile phones) in providing up to date conditions. This would provide a value-added service to the Trail.

Economic Contribution

The findings from this study support the previous research on the Murray to Mountains Rail Trail, with a stabilising of expenditure over the past six years to an overall contribution of \$447.29 per person per day during the Easter holiday period. Table 9 below now includes the most recent study in the international comparison, indicating that cycling in regional Victoria presents strong opportunities. It should be noted that, while the Australian findings are different from most of the reported studies from overseas, it is reasonable to assume that the economic value of many of the trails studied has also increased. As noted by one respondent:

Bike riding is becoming cooler...

However, due to the lack of published data, these studies remain our main point of comparison.

Table 9. International Comparison of Economic Contribution of Cycling Trails

Country	Study	Average per Day in Aust \$*	
USA	<i>National Park Service (NPS):</i>		
	Iowa	10.60	
	Florida	12.68	
	California (urban)	4.57	
	<i>Ohio-Kentucky-Indiana Regional Council:</i>		
1992			
1999	Miami	15.59	
2001	<i>Maine Report:</i>		
	Self-guided	63.31	
	Tours	132.38	
EUROPE	<i>England National Study:</i>		
	Day trips	16.86	
	Overnight Trips	274.46	
	1996	<i>UK Cycle Paths Survey:</i>	
	Day Trips	13.64	
	Holiday makers	45.96	
1998	<i>Switzerland Cycling Routes:</i>		
	Day Trips	32.44	
	Holiday makers	135.36	
AUSTRALIA			
2003 Study#	East Gippsland Rail Trail	323.55	
	Murray to Mountains Rail Trail	207.13	
	Warburton Rail Trail	190.50	
2006 Study#	Murray to Mountains Rail Trail	472.96	
2009 Study#	Murray to Mountains Rail Trail	447.29	

* Australian dollar value calculated on international exchange rates at September 20, 2009 (resulting in lower US\$ and GBP values)
 # Regional multipliers removed and indirect contribution estimated via Victorian TSA (see Economic Contribution Section)

Further Research

A self completion survey can only explore a phenomenon to a certain level, and as noted throughout the study, such self-reporting can provide inconsistent data. In-depth interviews and focus group research are a way that enables us to tease out the unusual areas, especially those related to expenditure. Such conversations can also bring out aspects and ideas not previously considered.

However, what is more urgently required are broader studies that consider not only the tourism operational aspects of cycling, but also the health, environmental and social elements of recreational trail cycling. Many respondents commented on these when asked why cycling is becoming more popular, and it is difficult to consider cycle tourism without including these aspects. As noted in the report, there have been some studies relating to cycle tourism from a market segmentation perspective (and there are some post graduate studies soon to be completed), but a broader (and more detailed) approach is required to bring the various elements together.

This study is part of a wider Rail Trails study undertaken in Easter 2009, however the primary Trail for the research was the Murray to Mountains Rail Trail. A further report on the other Trails will be presented as it becomes available.

The Final Word.....

The results of this research project have provided a wealth of information for anyone involved in the business of cycling, tourism and rail trails. However, the final word must go to one of our Rail Trail cyclists:

It's the new golf!!

BIBLIOGRAPHY

Access Economics (2005) *The Economic Contribution of Tourism to Victoria 2003-2004: An Updated Tourism Satellite Account Based Analysis*, Access Economics, September 2005

Beeton, S. (2003a) *The Economic Benefits of Rail Trails*, Faculty for Regional Development, La Trobe University, Research Report

Beeton, S. (2003b) Rails to Trails: the Economics of Trail Based Tourism, *Taking Tourism to the Limits Conference*, Hamilton, New Zealand, December, CD ROM

Beeton, S. (2003c) Rails to Trails: From a State Liability to a Local Community Asset, *BEST Sustainable Tourism Think Tank III*, Costa Rica, July 8-11, CD ROM

Beeton, S. (2006) *Regional Communities and Cycling: The Case of the Murray to the Mountains Rail Trail, Victoria, Australia*, School of Sport, Tourism and Hospitality Management, La Trobe University, Research Report

Beeton, S. (in-press 2009) Regional community entrepreneurship through tourism: the case of Victoria's rail trails, *International Journal of Innovation and Regional Development*

Bowker, J.M., Bergstrom, J.C. and Gill, J. (2007) Estimating the economic value and impacts of recreational trails: a case study of the Virginia Creeper Rail Trail, *Tourism Economics*, 13(2): 241-260

Dwyer, L., Forsyth, P., Spurr, R. and Ho, T. (2004) *Economic impacts and benefits of tourism in Australia : a general equilibrium approach*, Technical Report, CRC for Sustainable Tourism Pty. Ltd., Australia

Faulks, P., Ritchie, B., Brown, G. and Beeton, S. (2008) *Cycle Tourism and South Australia Destination Marketing*, Technical Report, CRC for Sustainable Tourism Pty. Ltd., Australia

Faulks, P., Ritchie, and Fluker, M. (2007) *Cycle Tourism in Australia: an investigation into its size and scope*, Technical Report, CRC for Sustainable Tourism Pty. Ltd., Australia

Gordon P.M., Zizzi S.J., Pauline J. (2004) Use of a community trail among new and habitual exercisers: a preliminary assessment' *Preventing Chronic Disease*, [serial online] Available from: http://www.cdc.gov/pcd/issues/2004/oct/04_0058.htm.

Ho, T.V., Spurr, R., Pambudi, D., Forsyth, P., Dwyer, L. and Hoque, S. (2008) *Tourism satellite account Victoria 2006–07*, Sustainable Tourism Cooperative Research Centre, Centre for Economics and Policy

Krizek, Kevin J. (2006) Estimating the Economic Benefits of Bicycling and Bicycle Facilities: An Interpretive Review and Proposed Methods. *Essays on Transportation Economics*, Vicente Inglada, editor, Springer publishing, pp.2-28

Murray to the Mountains Rail Trail (2008) *Rail Trail Downloads*, Online: http://www.murraytomountains.com.au/Pages/Rail_Trail.aspx?id=64 (accessed September, 2009)

Rail Trails Australia (2006) *Murray to the Mountains Rail Trail – Trail Description*, Online: <http://www.railtrails.org.au/states/trails.php3?action=trail&trail=22> (accessed October, 2006)

Sustainable Tourism Cooperative Research Centre (STCRC) (2008) *Tourism within Communities: the flow of visitor expenditure through economies and industries*, Sustainable Tourism Cooperative Research Centre

Tourism Australia (2008) *Regional Expenditure Tables*, Tourism Australia

Tourism Research Australia (TRA) (2008) *Regional Tourism Profiles, 2007, Victoria: High Country Region*, Tourism Research Australia, August 2008