



Monaro Rail Trail Feasibility Study

Draft Report
Volume 1

MONARO RAIL TRAIL FEASIBILITY STUDY DRAFT REPORT

VOLUME 1

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EXECUTIVE SUMMARY

The Monaro region is spectacularly beautiful and rich in Aboriginal and European history. It is steeped in Australian history and many of its towns appear in famous verse and books. The Snowy Mountains are a major tourist drawcard, but mainly during winter months when the ski fields host thousands of visitors. To sustain all year-round tourism in order to capitalise on the economic benefits that tourists bring, the Snowy Monaro Regional Council (SMRC) is keen to develop all-year round activities that complement the 'snow season'. A rail trail between Queanbeyan and Bombala could be one such activity.

This Feasibility Study addresses the development of a shared pathway (a rail trail) from Queanbeyan to Bombala utilising the now-disused NSW Government railway corridor. The disused railway corridor lies mainly in the Snowy Monaro Regional Council local government area but also traverses a section of the Queanbeyan Palerang Regional Council area.

The 213km railway corridor between Queanbeyan in the north and Bombala in the south has been disused for many years, apart from occasional and infrequent usage by tourist trains. These have now ceased operations for a variety of reasons including the cost of running such operations, declining revenue, damage to track and bridges and, presumably, increasing levels of accreditation and insurances required to run these types of services.

The Snowy Monaro Regional Council commissioned Transplan Pty Ltd to prepare a Feasibility Study for a possible rail trail from Michelago to Bombala (and a possible northern extension to Queanbeyan in the Queanbeyan Palerang Regional Council area). The Snowy Monaro Regional Council funded the project.



The bridge over the Bredbo River is very attractive, historic and a prominent feature of the proposed rail trail.

A rail trail is a multi-use recreation trail constructed on a disused railway corridor (public land) for non-motorised users. There are over 100 established rail trails in Australia, many of which are in Victoria and they attract thousands of visitors from all over Australia including from NSW (where there are none at present on Government owned railway corridors). Although rail trails are extremely popular with all types of recreational cyclists, they are also very well used by walkers/hikers, horse riders (where permitted), joggers, trail runners, people in wheelchairs, people in mobility scooters (gophers), parents pushing prams, school groups, clubs and families. They are not simply for lycra-clad cyclists as claimed by many opponents.

The former railway corridor between Queanbeyan and Bombala provides views of forested areas, bushland reserves, snow-capped mountains, wide treeless plains, sheep and cattle grazing in paddocks, and access to several pretty and interesting small villages and towns.

The corridor itself is completely intact, with no section of it having been sold off. Should it be converted into a rail trail, the benefits to the communities along it will be significant. As a rail trail, the corridor encapsulates the best of what rail trail users are seeking: attractive scenery, intact railway artefacts including embankments, cuttings, bridges, a tunnel, railway signage, signals and switches, turntables and beautiful station buildings and railway sheds. These are just some of the ingredients that are highly sought after by rail trail users. The fact that small towns and villages are evenly spread and well-spaced is an added bonus.



Although in poor condition, the 390m bridge over the Numeralla River is spectacular and would be a major attraction along the proposed rail trail.

This Feasibility Study was commissioned to ascertain whether it is a worthwhile project, and whether the trail will deliver the anticipated and desired benefits.

The brief for this Feasibility Study required that consideration be given to the prospect of a train service being re-established on the corridor and the possible need for the sharing of the corridor (i.e. a 'rail-with-trail'). It is acknowledged that the NSW State Government has invested funds into a comprehensive study for the use of the Queanbeyan to Bombala railway corridor for trains.

It is very evident that, should it be proven feasible that a train could be re-established on the corridor between Queanbeyan and Bombala, a trail could *not* share the same corridor as that train service. It is assumed (in the absence of any other information about the train proposal) that the train may utilise not just the same corridor as the disused railway line, but all of the bridges, the tunnel and all of the high embankments and deep cuttings. To have a trail alongside an operating railway in the same corridor would necessitate replicating all of those original bridges, replicating most of the embankments and probably many of the cuttings, and circumnavigating the tunnel. Nothing of the original railway formation could be used – and therefore all that infrastructure that rail trail users come to see and appreciate would not be experienced.

Instead, they would encounter merely a trail alongside a railway line, and cyclists and other potential users would have to deal with all the hills that such an alignment would have (instead of a reasonably flat formation that a former railway provides). As well as needing to replicate the railway formation and bridges, a trail beside an operating railway would necessitate the establishment of approximately 213km of 1.8m – 2.4m high chain link fencing – as that would likely be the minimum requirement imposed by the relevant authorities. Such a fence would cost many millions of dollars – on top of the costs of building bridges and the embankments that would be needed to cross low-lying areas and all the other costs of trail building. In addition, the installation of a 1.8m – 2.4m high fence between the trail and the railway would detract substantially from users' experience.

This Feasibility Study sought to answer a number of critical questions:

- *Is there a viable trail route (i.e. is a trail route physically possible)?*
- *Are there alternative uses for the corridor that will provide more value to the community? Are these alternative uses viable?*
- *Will the rail trail provide a quality user experience (terrain / landscape / history)?*
- *Is there a market for the proposed trail (i.e. local people and visitors who will be attracted to use it)?*
- *Will the rail trail create any unmanageable or unmitigated impacts on adjoining landholders' farming practices and lifestyles?*
- *Are the local governments and key stakeholders supportive of the concept?*
- *Are there supportive/strong advocates (in the community)?*
- *Is there a supportive community?*
- *Would the trail be value for money?*
- *Is there a commitment to the ongoing maintenance of the trail ("friends of ..." group or support network)?*
- *Will the trail provide a unique experience?*
- *Is there a demonstrated benefit to trail users and, especially, the host communities?*

The Feasibility Statement set out in Section 11 answers these questions. Generally, the answer to most of these questions is "Yes", except bullet points 2 and 5.

Rail trails are not a new idea. They've been around for over 60 years in America where there are now 2,130 rail trails totalling 24,075 miles (38,000 kilometres). There are another 812 rail trail projects being planned and/or developed in the USA totalling 8,684 miles (almost 14,000 kms).

There are many more in numerous other countries including Canada, England, Spain and New Zealand. Rail trails have become very popular throughout Australia over the last 30 years with numerous communities gaining benefit from the visitors they attract, and the money spent in local communities. The experience gained from the 100+ rail trails throughout Australia enables reliable forecasts to be made of the visitors that can be expected in the Monaro, the types of users the proposed rail trail will attract and the patterns of expenditure they make.

Numerous costs are involved in the conversion of a disused railway into a trail. These include fencing (especially where the corridor was not originally fenced), the provision of a good trail surface, the provision of safe road crossings (both at-grade and grade-separated), trailhead facilities (including parking, picnic facilities, information signage), stock crossings (where the trail divides paddocks), signage, toilets and shelters and the refurbishment of old and installation of new bridges.

The cost of bridges on this proposed rail trail is particularly high in comparison with other proposed rail trails elsewhere in Australia. There is approximately 1900 lineal metres of existing bridges, with several long structures including the 390 metre long bridge over the Numeralla River. The cost to transform these bridges to make them safe and suitable for cyclists, walkers and other users adds considerably to the overall cost of the trail – but these bridges are the quintessential features that make rail trails as popular as they are. (See Appendix 5).

Although rail trails are extremely popular with all types of cyclists, they are also very well used by walkers/hikers, horse riders (where permitted), joggers, trail runners, people in wheelchairs, people in mobility scooters (gophers), parents pushing prams, school groups, clubs and families. Rail trails also provide excellent venues for various events such as half-marathons, fun runs, park runs etc. Given the development of residential areas such as South Jerrabomberra, the proposed rail trail can also be used as a commuter facility for residents wishing to commute into Canberra or Queanbeyan (by bicycle). The ever-increasing sales of electric bikes, and their growing use on recreation trails, needs also to be factored into future use of the proposed trail.

Should it be developed, the Monaro Rail Trail will be a world-class rail trail. It is likely to attract users from not only from all over Australia, but from all around the world – just as the equally spectacular Otago Central Rail Trail (OCRT) on the South Island of New Zealand does. In fact, there is an inevitable comparison between the OCRT and the proposed Monaro Rail Trail. The OCRT is a multi-day adventure in the high country of New Zealand (a 3-day bike ride for most cyclists). It passes through sheep stations and numerous towns and small villages. It provides views of distant snow-capped mountains for most of the year. It has brought prosperity to small towns and businesses (including farms) that were in decline.











This Feasibility Study has included an extensive community consultation programme and the results of that consultation are presented in this report. It is significant that, of the 507 responses received by Council through an on-line survey, 95.9% supported the proposed rail trail (while 3% were opposed). However, the origin of these respondents is unclear.

It should be noted that this report is not a detailed Trail Development Plan. That would be the next logical step should a decision be made to pursue the development of the proposed rail trail. A Trail Development Plan is the equivalent of a construction blueprint. It would accurately locate the alignment of new fences, stock and machinery crossing points, trailside furniture, toilets and shelters, water points, interpretive panels, connecting tracks into each town, precise location of underpasses, and provide road crossing and trailhead designs. This Feasibility Study makes an allowance for all these costs of trail development in addition to the more general costs of trail preparation and trail surfacing, bridge repairs, fencing etc.

An extensive programme of one-on-one consultation with each adjoining landowner would also be undertaken during the preparation of the Trail Development Plan to ascertain the need for security and privacy screening, the precise location of stock and machinery crossings, fencing alignments and other matters of concern to the adjoining landowners.

Issues

In determining whether the proposed Monaro Rail Trail is worthwhile and viable an assessment was made of a number of issues and opportunities. None of the issues that follow are insurmountable with the exception of the possible future railway:

-  **Possible future railway.** Consideration was given to the possibility of accommodating both the proposed rail link between Canberra and Bombala and the proposed rail trail. At the time of preparation of this ‘rail trail’ Feasibility Study, the results of the ‘train’ Feasibility Study was still months away. As stated earlier, should it be proven feasible that a train could be re-established on the corridor between Queanbeyan and Bombala, a trail could *not* share the same corridor as that train service.
-  **Potential other uses of the corridor.** A number of ‘tourist railway’ operations have been conducted on parts of this disused railway corridor and a new one is proposed.
-  **Tenure and land ownership.** Though the railway corridor is still entirely in public ownership much of the corridor is grazed by cattle and sheep.
-  **Landholder concerns.** Issues tend to centre around ongoing farm management (disruption to farming practices and biosecurity concerns); non-farm management issues (safety, security privacy, theft, trespass, noise, disturbance and a range of related issues); and ongoing trail management and maintenance.
-  **Bridges: river and creek crossings (and overhead bridges).** There are approximately 90 bridges along the corridor, ranging in length from 3 or 4 metres through to the longest being 390 metres. These will be costly to repair/replace.
-  **Unfenced railways and the need for fencing.** The railway between Cooma and Bombala was built as an unfenced railway. Should a rail trail be developed, there will be a need for new boundary fencing for insurance purposes, to minimise interactions between stock and trail users, and to reduce maintenance costs by allowing grazing of the “excess” corridor.
-  **Unauthorised and informal use of the corridor.** Adjoining landowners have unrestricted access to the disused corridor, using it for general farming practices (including storage of equipment and sheep/cattle grazing). If the trail proceeds, the trail manager is likely to be given an overall lease for the corridor and will be required to deal with these unauthorised and informal activities.
-  **Removal of rail.** The steel railway track is (mostly) still intact and will need to be removed to allow the trail to be constructed, though some of it may be left intact within the Michelago, Cooma, Nimmitabel and Bombala Station areas.
-  **Clearing.** As the majority of the corridor has been disused for many years, there has been some regrowth of vegetation. While most of it is light regrowth, some significant regrowth has occurred. This will influence the cost of developing the trail.
-  **Costs – construction and maintenance.** Costs – both capital and maintenance – are a major consideration in any public infrastructure project. These need to be offset against a range of benefits – both economic and non-economic.








- ✚ **Trail surface.** There is mixed opinion on whether the surface of the trail should be sealed (i.e. bitumen or asphalt) or left unsealed (i.e. compacted gravel or limestone). Each has its advantages and disadvantages. Notably, a sealed surface will cost more to construct but would attract a wider range of users and therefore more users. A sealed surface would be cheaper to construct but may result in fewer users (as 'road' cyclists may not use it).
- ✚ **Ongoing legislative issues.** There is currently no clear direction from the NSW Government that it will provide funding and support for additional rail trail projects in NSW, despite legislative and administrative processes being developed to enable the Tumbarumba Rosewood Rail Trail. Closure of the railway by an Act of Parliament will be required prior to development of the rail trail.
- ✚ **Stakeholder positions.** The Snowy Monaro Regional Council's support for the rail trail is partially dependent on the outcomes of this study and a clear articulation of costs and benefits. The Queanbeyan Palerang Regional Council is not a participant in this Feasibility Study. Although it has given the SMRC in-principle support to undertake the study there may not be the support for the trail construction. The community groups that have come forward during the course of the study have indicated a very strong support for the proposal. There is an active Friends of Monaro Rail Trail which raises funds, commissions reports, prepares newsletters, attends meetings and a host of other activities. Some landowners have expressed their opposition and concerns.
- ✚ . The Monaro region climate is characterised by extremes of weather (compared to other places in Australia). Sudden changes in weather can occur and can impact severely on the safety and well-being of trail users (and others engaging in outdoor activities), though outdoor recreational activities are common in the region across the four seasons.



Brickwork within the Colinton Tunnel appears to be in excellent condition, although its structural integrity should be assessed prior to development of the proposed rail trail.

Opportunities

Rail trails also provide many notable opportunities. There are a number of specific elements within the area encompassed by the proposed trail route that provide opportunities and reasons for why a trail should be built:

-  **Distances and services on the corridor.** The proposed 213km rail trail has natural terminuses in major centres or towns or passes through major towns. Distances between towns/villages along the disused railway corridor are very good for enabling easy one-day bike rides for most cyclists (but long days for those walking). Trail segments are likely to be between 30km and 49km.
-  **Appealing landscapes and infrastructure.** The proposed Monaro Rail Trail would pass through extremely attractive scenery. Magnificent views to the nearby Tinderry Range and Snowy Mountains are ever-present, and undulating topography is constant along the corridor. Even the wide, open treeless plains are a feature uncommon on other rail trails, but equally stunning to potential visitors to this region. The landscape through which this disused railway corridor passes would have to be amongst the most attractive in Australia, and certainly one of the most picturesque landscapes for a trail. Infrastructure along the railway corridor is almost complete. Railway station buildings and even siding sheds and platforms remain; most bridges remain; distance pegs, signals and switches remain in most places. Turntables exist at the Michelago, Cooma and Bombala station grounds. Embankments and cuttings are a common feature.
-  **Aesthetics on the corridor.** Despite the fact that much of the disused railway corridor runs near to the Monaro Highway, this does not diminish the attractiveness of the corridor. Often the railway corridor (or adjoining road corridor) is still well vegetated, especially in the hillier, northern parts.
-  **Topography of the route.** One of the major appeals of rail trails is the gentle gradient, suitable for all types of cyclists, walkers and other users. This is the market that would be attracted to a rail trail.
-  **Connections between towns.** Taking trail users through towns will provide new business opportunities for service providers. Presently, there are generally good opportunities for potential trail users to get accommodation, food and drink, and other services at the towns and villages through which the proposed rail trail will pass. Development of the rail trail may provide a range of new business opportunities.
-  **Connection to Queanbeyan.** It would make good sense to make Queanbeyan (most likely the Queanbeyan Railway Station precinct) the northern terminus for the proposed rail trail, given the population of Queanbeyan and the existing connections into the ACT cycle and pedestrian networks. Development of the rail trail would also enable cycle commuting from, for example, the newly developing South Jerrabomberra residential estate.
-  **Broadening the recreation offerings.** The *Snowy Monaro Regional Economic Development Strategy 2018 -2022* includes a vision that the region develops as a year-round tourism destination. Provision of an additional off-road trail adds to the suite of tourist offerings in the region and encourages visitors to stay longer. A rail trail will add

to the stock of “off-season” (i.e. non-snow related) recreation offerings in the same way that mountain bike trails in the Snowy Mountains currently do.

-  **Community support.** There appears to be significant support from groups and individuals within the surrounding communities. It is also evident that there are strong advocates within the communities who have expressed a desire to get more involved in ensuring the proposed rail trail gets developed.
-  **Friends of Monaro Rail Trail.** A committed community-based group is an important element in a rail trail’s success. The existing ‘Friends of’ group has been around for a number of years and has undertaken numerous activities and fundraising to help promote the development of the trail. Numerous other ‘Friends of’ groups on other rail trails volunteer to undertake a wide range of routine maintenance tasks – saving the trail manager time and expense
-  **Attracting new visitors who spend money.** A trail such as the proposed Monaro Rail Trail will provide a number of opportunities. A trail will bring additional tourists and assist in keeping them longer in the area. A trail will create opportunities to build on existing industries and enterprises of the area.
-  **Promoting the existing railway museums.** Of particular interest to many future rail trail users would be the outstanding collection of intact railway infrastructure (and museums) at Michelago, Cooma and at Bombala. The efforts of local volunteers to preserve, maintain and promote these station precincts (complete with station buildings, sheds, multiple tracks, signals, switches and turntables) is highly commendable. Should a rail trail be developed, these museum precincts will be of great interest to visitors to these towns.
-  **Providing a momentum for station project upgrades.** Development of a rail trail will provide a stimulus for continued upgrading of railway station buildings and their adaptive re-use. The opportunity to run commercial enterprises (such as a bike hire business or a café) from within an existing station building could supplement the income for the relevant organisations that run these buildings and station grounds.
-  **Revenue from sale of steel tracks.** The recent experience from the Tumbarumba Rosewood Rail Trail (currently being constructed) is that, following the passing of the Bill in the NSW Parliament to close the railway line and the subsequent transfer of the corridor to the local government, ownership of the assets within the closed railway corridor passed to the local government.
-  **Business development.** There is a range of business opportunities for private sector investors arising from the potential development of a rail trail. Providing accommodation, food and beverages, supported and guided tours, and equipment, are some of the businesses that have arisen along other trails.
-  **Non-monetary benefits.** Trails can improve community connectivity and provide increasing recreational options for local people thus contributing to both physical and mental health of communities through which they pass.

Costs

The costs of construction of the proposed Monaro Rail Trail are an estimate of probable costs only. Accurate costs can only be determined, firstly, by the compilation of more detailed works lists accomplished through individual, detailed trail development plans for each section of the proposed rail trail and, secondly, via a tendering process.

The indicative costs for each section are as follows:

Table 1 - Costs Per Section - Summary

Section	Cost
<i>Section 1: Queanbeyan to Michelago (49km)</i>	\$6,846,580
<i>Section 2: Michelago to Bredbo (30km) – excluding major bridges</i>	\$5,525,980
<i>Major Bridges between Michelago and Bredbo</i>	\$3,037,500
<i>Section 3: Bredbo to Cooma (36km) – excluding major bridges</i>	\$6,932,610
<i>Major Bridges between Bredbo and Cooma</i>	\$8,750,000
<i>Section 4: Cooma to Nimmitabel (38km)</i>	\$6,956,290
<i>Section 5: Nimmitabel to Jincumbilly (37km)</i>	\$6,616,740
<i>Section 6: Jincumbilly to Bombala (24km)</i>	\$3,152,680
Total (excluding GST)	\$47,818,380

As indicated in the table, the estimated cost of construction is in the order of **\$48 million**. This is for an unsealed trail (i.e. crushed and compacted gravel or limestone or similar).




An extra \$10-15 million would be required to seal the trail (with bitumen/asphalt).

Business Case

It is always difficult to predict the economic impact of a new trail. Visitor numbers on the 1,000km Bibbulmun Track in WA (a long-distance walk trail) grew from 10,000 when the new alignment was first opened in 1997 to 137,000 in 2004 (*Colmar Brunton 2004*) to over 167,000 in 2008 (*Colmar Brunton 2009*) to over 300,00 in 2015 (*Hughes et al 2015*). This was on a trail that had existed in its entirety for many years but was substantially realigned and reopened in 1997 (although new sections of it had been opened prior to its ‘grand opening’). Visitors included those on ‘local trips’, day trips and overnight or longer stays (including those who travelled from end to end).

A dramatic increase in visitor numbers such as experienced by the Bibbulmun Track can be attributed to very good marketing of the track. The economic impact of the proposed Monaro Rail Trail is primarily dependent on the extent to which the trail is marketed and promoted. The Bibbulmun Track Foundation markets the track, organises events and organises guided experiences of the track – its role in marketing and promotion has been critical to the track’s success.

There is little doubt that the Monaro Rail Trail will bring additional tourists and keep them longer in the area. Other possible benefits from developing the trail include:

-  Improvements to community connectivity;
-  Increasing recreational options for local people; and
-  Creating opportunities to build on existing industries and enterprises of the area.

A trail such as proposed Monaro Rail Trail will have attraction to visitors – day trippers and overnight visitors. However, it will also add to the stock of existing trails for local people – people who live in towns and villages within easy reach of the trail. Some of these people will use the trail for exercise – these ‘back gate’ users may not be significant in terms of expenditure, but they are significant in terms of numbers as they would use the trail many times a year.






One of the key attractions of developing this rail trail is the opportunity to provide a rail trail experience for residents of NSW in NSW. The NSW State Government has previously indicated that one of the key outcomes it is seeking from tourism projects is to reduce the “leakage” of expenditure i.e. money being spent by NSW residents in other states (and countries) on holidays. This is in addition to attracting holiday makers from other States and countries. Another key element is interstate and international visitation to the region. A trail such as the Monaro Rail Trail will also attract interstate visitors particularly from the ACT which is already providing a significant number of visitors to the region (some 22.5% of summer visitors and 12% of winter visitors).

A (165km) trail from Michelago to Bombala (wholly within the Snowy Monaro Regional Council area) has the potential to add extensively to the number of existing visitors. Many new users will be attracted to the region simply due to the trail’s length and the landscapes through which it passes. Extending the trail 48km north to Queanbeyan (in the Queanbeyan Palerang Regional Council) has the potential to attract more users and may also change the make-up of users (with many more people close to the trail).

The length of the shorter trail (at 165 kms) provides for a perfect 3-day bike ride (with an attractiveness for riding sections of it in 2 days), while the longer trail (at 213 kms) provides for a perfect 3 - 5-day ride. As a rail trail, the corridor is reasonably flat and will therefore accommodate the full range of cyclists, as well as walkers.






With the right marketing, the trail will attract local users, day trippers and visitors. Under a relatively conservative scenario, the following outcomes are achievable.

Monaro Rail Trail (Michelago to Bombala – 165km)

-  Local use – 2,325 local users/year is a reasonable expectation. This will result in an economic injection of \$5,090/year.
-  Expansion of the existing day tripper market to the region. 25,000 new day trippers/year would inject \$3,696,750/year into the regional economy.
-  With a new significant recreation attraction, some day-trippers may stay overnight, generating a new income stream. If the trail converted 2,000 day trippers into overnight visitors, this would inject an additional \$426,060/year into the regional economy.
-  If 2,000 visitors stay an extra day to use the trail, an additional \$426,060/year would be injected into the regional economy.
-  If 20,000 new visitors come to the region solely (or primarily) to do the trail, an additional \$14,912,100/year would be injected into the regional economy.

The total injection of dollars into the local economies from local, day trip and overnight visitors may be of the order of **\$19,466,060/ year** (under a range of conservative scenarios) from **51,325** users. Complex economic analysis (beyond the scope of this project) is needed to determine how many jobs are likely to be created by such expenditure.

Monaro Rail Trail (Queanbeyan to Bombala – 213km)

-  Local use – 13,820 local users/year is a reasonable expectation. This will result in an economic injection of \$30,265/year.
-  Expansion of the existing day tripper market to the region. 26,000 new day trippers/year would inject \$3,844,620/year into the regional economy.
-  With a new significant recreation attraction, some day-trippers may stay overnight, generating a new income stream. If the trail converted 2,500 day trippers into overnight visitors, this would inject an additional \$432,325/year into the regional economy.
-  If 2,500 visitors stay an extra day to use the trail, an additional \$432,325/year would be injected into the regional economy.
-  If 25,000 new visitors come to the region solely (or primarily) to do the trail, an additional \$19,705,275/year would be injected into the regional economy.

The total injection of dollars into the local economies from local, day trip and overnight visitors may be of the order of **\$24,444,810/ year** (under a range of conservative scenarios) from **69,820** users. Complex economic analysis (beyond the scope of this project) is needed to determine how many jobs are likely to be created by such expenditure.

The Monaro Rail Trail (whichever of the two options is developed) will be the longest rail trail in Australia in one of the most scenic regions. It has the potential to become an iconic trail and those advocating for it are not mistaken in arguing that it could be similar to New Zealand's Otago Central Rail Trail which attracts people to the South Island of New Zealand primarily (and sometimes only) to undertake a 3 - 5 day journey along it. Across 3 surveys (2008, 2011, 2014/15), the number of users traversing the complete Otago Central Rail Trail (150 kms) has varied between 12,000 and 14,000. In addition, 24,000 users have used sections of the trail. This is the likely use pattern of the Monaro Rail Trail (the shorter or longer version). The Otago Central Rail Trail attracts 61% of its users from within New Zealand, which has a total population of just under 5 million people. Accessing the trail is not simple but flights from New Zealand's two major centres of Auckland and Wellington (the North Island is the source of 40% of trail users) to Christchurch (the trail's major city access point) are 1 hour 25 mins and 1 hour respectively. Driving is more difficult from either of these centres. By comparison, Sydney and Melbourne have a combined population of over 10 million people and are within a 1-hour flight of Canberra – the proposed trail's major access point. In addition, driving from either of these cities is relatively simple. Sydney to Canberra is a 3-hour drive (and an additional 1 hour to Michelago) while Melbourne is a 6.5 hour drive to Bombala (passing several rail trails along the way which could be packaged together as a long holiday experience). In addition, Canberra with a population of over 410,000 is on the trail's doorstep.

The Murray to the Mountains Rail Trail in Victoria presents similar logistics – Beechworth (one of the key starting points) is 3 hours from Melbourne, 4 hours from Canberra and 6 hours from Sydney. This trail attracts 60,000 users per year.

Given the numbers of people using these two similar trails in particular, the visitor estimates for visitors coming to do the whole (or large sections of the) Monaro Rail Trail are reasonable and supported by other similar existing trails.


It should be emphasised that user numbers will not necessarily be realised in the first years of operation if the trail proceeds. It also should be noted that these numbers may grow as the overall visitor numbers grow.

Trail development offers a range of new business opportunities and the opportunity for existing businesses to extend their offerings. The trail has the potential to improve the sustainability of businesses reliant on tourism.





The completion of a trail would not simply provide an injection of funds to stabilise and grow existing and new businesses. The psychological impact on businesses can also be very important; businesses operating around other rail trails believe the trails have contributed to their businesses as well as helping to position their area as an authentic leisure holiday destination.

The trail construction process itself will provide an economic input to the region.

The trail will provide a number of less quantifiable benefits. These include:

-  Health-related benefits to the wider community. Data from the USA indicates that every \$1 of funds spent on recreational trails yield direct medical benefits of \$2.94. The trail will encourage people to exercise – the economic benefit to society of getting an inactive person to walk or cycle is between \$5,000 and \$7,000/year. Medical research has shown that 1 hour of moderate exercise can add more than 1

extra hour of high-quality life to an individual. The trail can also provide a facility for “green scripts”. The ACT Government is currently working with the medical profession to determine the outcomes of a doctor “ordering” a patient to spend time outdoors with an ACT park ranger. So-called “green scripts” could be a new way to treat heart disease, high blood pressure, obesity and mental health issues.

-  Rail trails are an accessible form of recreation. Trail-based recreation is generally free, self-directed and available to all people, all day, every day. Good quality, accessible trails encourage physical activity and improved health. Increasing recreational options for local communities will aid overall community wellbeing. The psychological benefits of trails remain under-estimated.
-  Quality recreational facilities, such as trail networks, can help create attractive places to live and visit. Walking and cycling are relatively cheap modes of transport. Trails also provide a low impact means of travelling through the landscapes and play an important role in connecting people with nature. Extending the trail to Queanbeyan also offers the opportunity to make the rail trail part of the active transport network within Queanbeyan. The rail trail would offer off-road opportunities for residents of Jerrabomberra, the new subdivision at Tralee and in Queanbeyan West to get to work and undertake other activities in Queanbeyan (or heading the other way to Hume). It also provides an off-road opportunity for these users to access the Canberra bike network to travel to Fyshwick and other eastern Canberra workplaces.
-  Trails present a unique opportunity for education. People of all ages can learn more about nature, culture or history along trails. Trails have the power to connect users to their heritage by preserving historic places and by providing access to them. They can give people a sense of place and an understanding of the enormity of past events. An added advantage of a rail trail is that it provides an opportunity for city to connect to country, in a way “bush” trails do not.
-  Trails provide a number of environmental and cultural benefits including opportunities for the community to experience natural and cultural environments, increased community ownership which helps to preserve natural and cultural values, and opportunities for community participation in conservation and revegetation work.

FEASIBILITY STATEMENT

Following consideration of the major issues pertaining to the development of a trail on the disused Government railway corridor between Queanbeyan and Bombala and taking into account the views of key stakeholders, groups and individuals consulted (and background information obtained during the course of the project), this Study recommends that the proposed rail trail proceed, *subject to a number of conditions being met*.

The conditions upon which the rail trail should proceed are:

1. The NSW Government does not proceed with the reinstatement of a train service on the current-disused railway corridor between Queanbeyan and Bombala;
2. The Queanbeyan Palerang Regional Council (QPRC) resolving to actively support the development of a trail on the disused railway corridor within its area (generally Queanbeyan Railway Station to its southern boundary just north of Michelago) in order to create the best possible rail trail. No commitment from QPRC does not mean the trail should not proceed. A rail trail between Michelago and Bombala would be successful.
3. The NSW Government enacting legislation that allows conversion of this rail corridor to a rail trail, and the resolution of legislative and administrative processes that enables the corridor to be vested in another entity;
4. Both Councils (or a Committee of Management) being prepared to accept vesting of the entire former railway corridor between Queanbeyan and Bombala, with an acknowledgement that sub-leases may be required to permit other activities (if appropriate) such the possible future activities of the Cooma Monaro Railway Inc and the Friends of the Bombala Railway Inc;
5. A cooperative approach with the Cooma Monaro Railway Inc. and the Friends of the Bombala Railway Inc. be forged with regard to the shared use of the former railway station precincts at Cooma and Bombala;
6. The project proponents pursue discussions with the Cooma Monaro Railway Inc. and the Friends of the Bombala Railway Inc. to foster the development of complementary activities at the Cooma and Bombala Railway Stations, including the refurbishment of the infrastructure at the railway yards and the establishment of short tourist rail services (if they can be proven feasible and are approved by the relevant authorities) on track that will be retained within the station grounds;
7. Detailed Trail Development Plans for the rail trail being prepared, which will involve a thorough and comprehensive examination of the entire corridor, the preparation of detailed works lists and cost estimates;
8. A comprehensive programme of one-on-one discussions on-site with affected adjoining landowners be undertaken to ascertain their individual concerns and to work out together solutions to each issue raised;
9. The project proponents (the two Councils) seek funding from external sources (notably the NSW Government and Commonwealth Government) for the construction of the proposed rail trail (and the detailed trail development plan that will need to be prepared prior to construction);

10. A Committee of Management, comprising (at least) representatives of both Councils, the Friends of the Monaro Rail Trail Inc., the Cooma Monaro Railway Inc. and the Friends of the Bombala Railway Inc, the NSW Rural Fire Service, residents of the communities, local landcare groups, local business proprietors and adjoining landowners, be formed to guide the ongoing planning, design and construction, management and maintenance of the proposed Monaro Rail Trail and the former railway corridor. (The Committee of Management could be modelled on successful Victorian examples);
11. The preparation of a Corridor Management Plan before construction, including a comprehensive maintenance programme (detailing the ongoing maintenance) for the trail and corridor;
12. The preparation of a Bush Fire Risk Management Plan for the corridor;
13. Grazing and various other existing uses of the corridor to be considered on their merits, and suitable solutions found to enable the activity to continue where reasonably achievable;
14. The Trail Manager to assume liability responsibility for trail users and are to take all actions possible to mitigate potential claims against landowners and neighbours;
15. A commitment to ongoing maintenance of the trail being given by both Councils, a Committee of Management and volunteers; and
16. The proposed Committee of Management give consideration to the appointment of a trail manager so that landowners have a direct point of contact for issue resolution.

There are a number of stages for trail development if and when a decision is made to proceed with the development of the Monaro Rail Trail as recommended in this report.




1. Undertake a series of more detailed investigations, notably detailed bridge testing.
2. Undertake consultation and negotiation with a range of stakeholders as noted in the Feasibility Statement.
3. Actively seek funding for the trail planning and development.
4. Prepare a detailed design development plan for the rail trail, which will involve a thorough examination of the entire corridor, the preparation of detailed works lists and cost estimates.
5. Proceed with a staged development of the rail trail. The recommended stages are:
 - Stage 1 of construction: Queanbeyan to Michelago (49kms).
 - Stage 2 of construction: Michelago to Bredbo (30kms).
 - Stage 3 of construction: Bredbo to Cooma (36kms).
 - Stage 4 of construction: Cooma to Nimmitabel (38kms).
 - Stage 5 of construction: Nimmitabel to Jincumbilly (37kms).
 - Stage 6 of construction: Jincumbilly to Bombala (24kms).

Factors Supporting the Decision

In formulating a decision about whether the proposed Monaro Rail Trail is feasible or not, due consideration has been given to a range of factors.

From a trail users' perspective, the former railway corridor between Queanbeyan and Bombala is extremely attractive. It offers a range of positive factors. When compared to numerous other disused railway lines elsewhere in Australia (both those which have been converted and those which have not), this is an excellent opportunity.

- ✚ The entire railway corridor between Queanbeyan and Bombala remains in public ownership with few constraints to the development of a trail along its entire length (other than the prospect of a train service being returned).
- ✚ The railway corridor is situated in one of the most scenic landscapes in Australia, with a great diversity of landforms, vegetation and existing historic railway infrastructure (including the numerous and sometimes long timber bridges, a tunnel, embankments and cuttings, the original railway station buildings and outbuildings, sidings, several turntables, switches and signals).
- ✚ The railway corridor offers the potential for a wonderful multi-day trail experience and, coupled with the ideal distance between towns/villages, could become a significant trail destination in NSW, especially when bundled with other attractions and trails of the Snowy Monaro region.
- ✚ The corridor is easily accessible and is within a short distance of Canberra and Sydney (and numerous smaller towns) and is in an established tourism region with high visitation rates both for day-trippers and overnight visitors (especially to the snowfields). Melbourne is also relatively close (at least by air). Adding another attraction will potentially bring additional visitors and keep visitors longer in the area.
- ✚ The development of several trailheads at towns/villages along the trail (as well as the two anchors of Queanbeyan and Bombala) provides for a variety of rides/walks of different lengths.
- ✚ The trail does not have a complicated route through and getting out of Queanbeyan or Bombala (unlike some existing rail trails in Australia and overseas). The proposed crossings of the Monaro Highway that runs through the region could be dealt with comfortably via underpasses or, where the speed limits are low in town areas, via at-grade crossings.
- ✚ Just about all of the major elements of the railway infrastructure remain (the formation, cuttings, embankments and most of the bridges and culverts). Two bridges over minor roads have been removed.
- ✚ Being in an established tourism region means that there is a good supply of accommodation options for visitors coming to use the rail trail, though more may be developed in response to the opportunity provided by the rail trail.
- ✚ The aboriginal history of the Monaro, the surrounding farming properties and various other land uses, the natural qualities of the region, the history of construction of the railway and a host of other interesting subjects results in a huge potential for interpretation along the rail trail – adding to and enriching the experience of trail users.

-  As a rail trail, the 213km corridor is reasonably flat (as it was built with low grades for steam locomotives) and will therefore accommodate the full range of cyclists, as well as walkers, joggers, runners, wheelchair and gopher users etc. The entire trail route would enable a 4 - 5 day cycle ride and perhaps an 8 day walk but there are opportunities to 'hop' on and off the rail trail and ride/walk shorter sections.
-  The trail will improve non-motorised transport connections between the newly developing areas at South Jerrabomberra and Queanbeyan and Canberra, promoting walking and bicycle commuting options among local people.
-  As has happened on lengthy rail trails in other locations around Australia, the rail trail will provide local people with a new opportunity for walking, cycling, fun runs, triathlons, half marathons (or full marathons), wheelchair use and educational opportunities for school children.










SECTION 1 – INTRODUCTION AND BACKGROUND

1.1 The Purpose of this Feasibility Study Report

The primary purpose of this Feasibility Study report is to provide to the Snowy Monaro Regional Council an opinion on whether the development of a trail (the proposed Monaro Rail Trail) on the (currently) disused railway between Queanbeyan and Bombala is viable or not.

1.2 The Scope of Works









The Request for Quotation specified that the Feasibility Study address the following areas:





-  Overview of Overall Experience
-  Community Consultation on Concept
-  Rail Trail Alignment
-  Trail Experience Development
-  Trail Construction Planning Assessment
-  Calculation of Probable Cost of Trail Construction and Maintenance
-  Assessment of Social and Economic Benefits
-  Timeframe for Rail Trail Construction
-  Future Governance Model

1.3 The Feasibility Study Process












One of the first phases in determining feasibility is examining the various factors that influence the practicality of building a trail along a disused railway. Some of these factors will make construction difficult, expensive and in one case impossible, while many of these factors will facilitate development of a rail trail. These factors can be grouped under “Issues” or “Opportunities”. Some issues that may impact negatively on the proposal can of course be resolved through design, negotiation or by the spending of funds to mitigate the problem.

This Feasibility Study sought to answer a number of critical questions:

-  Is there a viable trail route (i.e. is a trail route physically possible)?
-  Are there alternative uses for the corridor that will provide more value to the community? Are these alternative uses viable?
-  Will the rail trail provide a quality user experience (terrain / landscape / history)?
-  Is there a market for the proposed trail (i.e. local people and visitors who will be attracted to use it)?
-  Will the rail trail create any unmanageable or unmitigated impacts on adjoining landholders’ farming practices and lifestyles?
-  Is the local government and key stakeholders supportive of the concept?
-  Are there supportive/strong advocates (in the community)?
-  Is there a supportive community?

-  Would the trail be value for money?
-  Is there a commitment to the ongoing maintenance of the trail (“friends of ...” group or support network)?
-  Will the trail provide a unique experience?
-  Is there a demonstrated benefit to trail users and, especially, the host communities?

In progressing this study, the following tasks were undertaken:

-  An inception meeting, involving staff from the Snowy Monaro Regional Council, members of the Friends of Monaro Rail Trail and the consulting team.
-  Field work to assess the entire disused railway corridor between Queanbeyan and Cooma, and between Cooma and Bombala. This fieldwork included an examination of all road crossings, the condition of the former railway corridor and many of the bridges along the corridor (including the most significant and lengthy bridges).
-  Conversations with several businesses in towns/villages along the proposed rail trail route, as well as with a number of adjoining landowners.
-  Community consultation sessions (“Open Houses”) in each of the towns/villages through which the railway corridor passes.
-  An on-line survey on Council’s Your Say webpage.
-  General observations made of the terrain and topography through which the railway corridor passes, an assessment made of the scenic qualities of the region, observations made of the services available to potential trail users in the towns/villages, and an assessment made of the viability of each component of the route to become a stand-alone rail trail (should the entire route be deemed as not feasible).
-  Field observations to determine (a subjective view of) the likelihood of a train service resuming on the corridor (based on a visual assessment of the condition of the track and sleepers, the condition of bridges, the directness or otherwise of the railway corridor, the number and locations of road crossings and other features and factors that may influence whether a rail service is practical and feasible).
-  Fieldwork to enable observations and conclusions to be made of a range of factors that will assist in the determination of whether the rail trail is feasible.
-  Structural testing of a number of the more significant bridges by a qualified civil engineer; with resultant cost estimates for remedial work to sustain rail trail usage.
-  An examination of the expected construction and infrastructure works required along the corridor and the likely costs.
-  An assessment of the likely visitor numbers, where they might come from, what they might spend and consequently an indication of the likely economic benefits of developing the trail.

1.4 What Is A Rail Trail?

A rail trail is a multi-use recreation trail constructed on a disused railway corridor (public land) for non-motorised recreation. There are over 100 established rail trails in Australia, the majority of which are in Victoria. South Australia, Western Australia, Queensland, Tasmania and the Northern Territory also have rail trails. Approximately 15 -20 are under consideration in NSW. The state's first rail trail on a Government owned corridor is currently being constructed between Tumbarumba and Rosewood (21km). It is regarded as a 'pilot' project to enable the NSW Government to assess the legislative and administrative processes and procedures to enable further rail trail conversions to occur. The process for converting a rail corridor to a recreation trail in NSW has until recently been extremely difficult, requiring an Act of Parliament to close a railway line. The NSW rail trails that exist (such as the Fernleigh Track in Newcastle) have all been developed on privately owned rail lines.



The Port Fairy to Warrnambool Rail Trail in Victoria offers peaceful riding through rural landscapes with outstanding views to the coast and to an extinct volcano (Tower Hill).

1.5 Requirements for Successful Rail Trail Development

Rail trails are different from each other, but a number of characteristics often distinguish the good ones. These features are drawn from a number of published sources and the consultants' own extensive experience with rail trails.

- ✚ Many successful rail trails have accessibility to large population centres both for visitors and as a stimulus for local demand. The Monaro Rail Trail's proximity to the Canberra population (known for its high levels of cycling) augurs well for the popularity of the proposed trail.
- ✚ There are existing or easily developed tourism infrastructure in or near townships along the rail trail - places to eat and drink, explore and stay.
- ✚ Good rail trails have some heritage infrastructure in place such as historic stations, bridges, tunnels, goods sheds, sidings, platforms, turntables, switches, signals, and distance posts. Rail trails elsewhere have utilised their railway history as part of their attraction. Remaining major elements of the railway infrastructure (formations, deep cuttings, high embankments, bridges, culverts) add significantly to the user's experience. Built and social heritage values are a critical part of the rail trail experience not often experienced on other types of recreational trails.

- ✚ A common feature is community and adjacent landholders' level of support for the project to move ahead. Many (though not all) adjacent landholders are initially suspicious of rail trails; they often become converts once a trail is built.
- ✚ A uniqueness of experience is often important – be it a stunning landscape with views to distant snow-capped mountains, adjoining land uses or special attractions (such as long timber bridges, railway tunnels or railway museums).

- ✚ Many of the good rail trails have a regional or state tourism significance (some have national and international significance). Significance is elevated where extensions are made to connect to services in towns. The best rail trails have natural terminuses in major centres or towns. Intermediate towns easily accessible along the trail are critical when a trail is long and an added bonus when the trail is short.



Rail trails often are routed along river valleys, where it was easy to build railways. This is the case for the Row River Rail Trail in Oregon USA, above. Similarly, the proposed Monaro Rail Trail will follow the flat grades along several creeks in the region.

- ✚ The best rail trails are located in highly scenic surrounds, with spectacular views of the surrounding landscapes. These trails are often full of variety and interest. The best rail trails traverse places of cultural and natural history and conservation and provide opportunities to view birds, other wildlife and remnant vegetation.
- ✚ The good rail trails often provide opportunities for short, medium and long length rides and walks on the main trail. Having options is a bonus.
- ✚ Railway corridors can provide a great insight into the history of the region – both European settlement and Aboriginal use. Good interpretation will mark out an excellent trail. There are many good recreation trails (including rail trails) in Australia – few have good interpretation. Interpretation adds significantly to the user's experience.
- ✚ In a similar vein, trails that emphasise local conditions – flora, fauna, history, construction materials, etc. - are very popular. Good interpretation will bring out this local flavour.
- ✚ Well-signed and mapped trails - both on the trail and easily available elsewhere - are more successful than those that are not.
- ✚ Informed, friendly and supportive locals make a user's experience more pleasurable.

- ✚ The best rail trails offer a challenge, and they offer peace and solitude.
- ✚ A well-maintained trail and a strong community support network add to the user's experience, primarily because the trail remains in good condition. Such a community network could include a committed and purpose-dedicated management committee, a strong "Friends of the Trail" group or even a full-time trail manager. Various rail trails in Australia feature at least some of these elements.

In addition, all rail trails have a number of positive features which mark them out as uniquely rail trails (as opposed to other recreational trails):

- ✚ Rail trails are trails for people of all abilities and all types of bicycles. Good trails provide equity for people of many levels of fitness and equipment to gain access to the types of experience within the region.
- ✚ All rail trails are motor vehicle free i.e. safe for all types of trail users. Minimising the number of major road (at-grade) crossings adds to the experience. Trails rarely interrupted by road crossings appeal more than those which constantly cross roads – well marked and safe crossings where necessary add to the success.
- ✚ All railway formations (through cuttings and along embankments) provide a gentle gradient and sweeping bends, suitable for all types of cyclists, walkers, wheelchair and gopher users, and where appropriate, horse riders.
- ✚ All rail trails offer safety for users compared with urban shared pathways which have driveways, light poles, blind corners, poor sightlines, and are often 'congested' as users cannot see other users approaching due to poor sightlines.

Some Facts About Rail Trails

- ✚ Rail trails are not something new.
- ✚ There are over 2,100 rail trails in the USA - totalling over 24,000 miles (that's 38,000 kilometres!). First one developed in the 1960s.
- ✚ There are rail trails in the United Kingdom, Canada, New Zealand, Spain, France, Germany, numerous other European countries (eg. Latvia, Estonia) and other countries around the world.
- ✚ There are already 100 rail trails in Australia (30 in Victoria, 20 in WA, 20 in Tasmania, 15 in Queensland, 8 in SA, 3 in NSW and 2 in NT).
- ✚ First rail trail in Australia? Railway Reserves Heritage Trail in Mundaring, Western Australia. It was developed over 30 years ago.
- ✚ Rail trails are built along **publicly** owned disused railway corridors.
- ✚ Rail trails are for "non-motorised" users - cyclists, walkers, runners, parents pushing prams, horse riders (sometimes), people in wheelchairs, fun runs and triathlons.
- ✚ Rail trails offer safe, flat routes away from dangerous roads and provide access into rural areas for people of all abilities.
- ✚ They traverse a variety of urban and rural landscapes including farms and paddocks, vineyards, forests and wetlands.

Indeed, it is the comparative flatness and good sight lines offered by rail trails, coupled with a motor-vehicle-free walking and cycling environment, that rail trail users seek out. This type of

experience cannot be provided in a road-side trail, as numerous opponents of rail trails often suggest. In the case of the Monaro Rail Trail, enabling cyclists to get off the Monaro Highway is highly desirable. Cycling alongside the Monaro Highway, as suggested by several people, is not a substitute for developing the proposed rail trail.

Rail trails are not new – they have been established in America for nearly 60 years. These provide successful models for Australian rail trails.





1.6 Who Uses Rail Trails and Why?

Observation of many operating rail trails throughout Australia, New Zealand and North America indicates that there is a very wide diversity of people (and groups) that use rail trails.

The predominant user group for rail trails is cyclists, ranging from elderly people, to baby boomers, young couples, family groups with children, teenagers and young children. Walkers and horse riders are also attracted to rail trails, but in far lesser numbers. Wheelchair and gopher users can also use rail trails. They all are using rail trails for a reason: they enjoy flat, motor vehicle traffic-free routes, away from the noise and smell of roads, in scenic and often forested areas, away from trucks and speeding cars.

Rail trails appeal to individuals, to couples, to groups. In fact, a significant proportion of trail users on the Otago Central Rail Trail on the South Island of New Zealand are groups. These groups consist of school groups, sporting clubs, work groups, social clubs, Over 50's groups and organised tour groups. Some use the rail trail for team-building, some use it for fitness training, others for a social club outing. Others use the Otago Central Rail Trail simply for the outstanding beauty and scenery that it provides.

A study of the impact of rail trails on the communities through which they pass was undertaken by Professor Sue Beeton of La Trobe University. The study involved interviews and survey of users of the Murray to the Mountains Rail Trail in NE Victoria over the 2009 Easter weekend. It found:

-  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.
-  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.
-  Ages were varied, ranging from one year old to 79, with a slight majority of men (53%). 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.
-  Half of the respondents had past experience in using rail trails and identified the Murray to the Mountains Rail 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.

The Hauraki Rail Trail in New Zealand is particularly popular with the "baby boomer" and family clientele from Auckland and the wider Waikato, with 24% of users coming from Auckland, 15% from Hamilton, and a large proportion of users being older riders (*New Zealand Ministry of Business, Innovation and Employment 2013*).






1.7 The Monaro Rail Trail Proposal

The proposed Monaro Rail Trail is envisioned to follow the disused rail line from Queanbeyan to Bombala, a distance of 213 km. This is considered a good distance for a cycle tourism experience enabling (for most potential users) a 4 - 5 day journey - by family groups and leisure cyclists who might ride up to 50 kms /day. The corridor has been (rightly) compared with the world-renowned Otago Central Rail Trail on the South Island of New Zealand. That trail is 150km long, takes 3 - 4 days to complete by bicycle, and is used by over 14,000 people each year. It passes through very similar landscapes and adjoining land uses.

The proposed Monaro Rail Trail would traverse through a combination of timbered and open country between the Canberra Valley, Cooma, the Great Dividing Range near Nimmitabel and ending in the township of Bombala. There are many interesting rail features including heritage listed bridges, sidings, sheds and stations all of which add to the experience and the story that can be told. The pastoral story and heritage of the region is also visible through properties and remnants of the earlier role of the railway to transport wool and other produce.

Following several years of discussion in the community, a pre-feasibility assessment was completed in October 2018 (*TRC Monaro Rail Trail Pre-feasibility Assessment October 2018*). That study report provided a high-level overview of the likely experience, potential markets and economic benefits. The pre-feasibility assessment concluded that the proposal has merit and would offer a great cycle tourism opportunity providing certain criteria could be met.

The significant criteria identified were:

-  Legislation is created to enable use of the railway easement for the long term;
-  Appropriate funding is provided for a high-quality gravel trail to be constructed with ongoing funding mechanisms identified for maintenance;
-  There is commitment from landholders and communities along the alignment to establish and deliver appropriate services to riders (accommodation, hospitality, experience/attractions);
-  Where there are significant gaps in the distance between likely services, appropriate infrastructure and services are planned and delivered; and
-  An active rail line does not proceed between Canberra and Eden on the same redundant railway line.

1.8 History of Rail Trails in America

The rails-to-trails movement began in the USA in the mid-1960s. Local people came up with the idea to convert abandoned or unused rail corridors into public trails. Once the rail tracks were removed, people naturally walked along the old grades, socialising, exploring, discovering railroad relics, marvelling at the industrial facilities such as bridges, tunnels, abandoned mills, sidings, switches and whatever else they could find. In the snow of winter the unconventional outdoor enthusiast skied or snowshoed on the corridor, but these were days before even

running and all-terrain bicycles were common, so the predominant activity was walking. None of the corridors were paved or even graded — they were simply abandoned stretches of land.

"Rails-to-Trails" is what people called the phenomenon. The name was catchy and descriptive enough to give the concept a tiny niche in the fledgling environmental movement that was gathering momentum. However, it was destined to move into the mainstream of the conservation and environmental movements. It had all the ingredients: recycling, land conservation, wildlife habitat preservation and non-automobile transportation — as well as historical preservation, physical fitness, recreation access for wheelchair users and numerous other benefits.

Today, nearly 60 years later, rail trails have made a significant mark in America, with around 100 million users per year travelling on 24,075 miles (over 38,000 kms) of trail on 2,131 rail trails. There is another 812 rail trail projects being planned and/or developed for a total of 8,684 miles (almost 14,000 kms) (Rails-to-Trails Conservancy website):



The Burke-Gilman Rail Trail in Seattle (Washington, USA) is one of that country's oldest and most popular rail trails. Studies along that trail corridor have demonstrated that property values have risen as a result of the development of the trail and are higher with close proximity to the trail.

<http://www.railstotrails.org/our-work/research-and-information/national-and-state-trail-stats/>). The longest trail is the Katy Trail State Park in Missouri (240 miles) while 13 other trails are longer than 100 miles. All American states have a rail trail network. Missouri has the most rail trail miles (2,320 miles on 113 trails), while Pennsylvania has the most trails (169 rail trails covering 1,753 miles). Wisconsin is the home of the first rail trail in America — the Elroy Sparta State Trail opened in 1965.

In Seattle, more than 1,200 people a day cycle along the 16 mile Burke-Gilman Trail, near Lake Washington, while in Florida over 100,000 people stroll, skate and cycle along the 22 mile Pinellas Trail every month. In Washington D.C. the easy grades and varied topography of the 45 mile Washington and Old Dominion Railroad attract nearly two million users annually, including cyclists, runners, equestrians, people with disabilities, skaters and cross-country skiers.

1.9 Rail Trails in the UK

In the UK, a number of disused rail corridors form part of the Sustrans long trail cycle network across mainland Britain — the rail trail movement is not as clearly articulated in the UK as it is in the USA or Australia. The Bristol to Bath rail trail is one of Sustrans' first dismantled railway paths and now carries over a million visits a year. It runs 13 miles from the heart of Bristol to the outskirts of Bath, passing old steam trains at Bitton Station. The High Peak Trail and the Tissington Trail in the Peak District are two of the best known and most popular routes in the

country offering a superb challenge in the heart of the Peak District. The High Peak Trail runs for 17.5 miles (with a flat section of 12 miles) while the Tissington Trail is shorter, running for 13 miles. The Camel Trail in Cornwall is the most popular recreational ride in the country, running 16 miles from Poley's Bridge and the wooded countryside of the upper Camel Valley down to Wadebridge and alongside the picturesque Camel Estuary as far as Padstow.

1.10 History of Rail Trails in Australia

In Australia, conversion of corridors to rail trails is a relatively recent phenomenon driven by the closure of many railways in the 1980s and 1990s (although rail closures have been occurring continuously since the end of the Second World War).

Rail trail conversions have proven most popular in Victoria. The Victorian Trails Strategy 2014-2024 reports that there are currently over 800 kilometres of rail trail in Victoria, while the Rail Trails Australia website lists over 30 rail trails throughout Victoria. Some listed are still under construction or require signage and/or publicity materials, though they are in use.

One of the best known of Victoria's rail trails is the Lilydale Warburton Rail Trail which is situated some 40km east of Melbourne (at the end of the suburban train line). This trail caters for all types of bikes, walking, horse riding and wheelchairs (for some segments)

due to the outstanding surface material used. The trail passes wineries, cafes, pubs and restaurants along the Yarra River valley.

The Murray to the Mountains Rail Trail, in northern Victoria, is the most developed of all Victorian rail trails with a sealed surface for its entire distance (97 kilometres). The trail follows the picturesque Ovens Valley and has views of Mt Buffalo and a good climb to historic Beechworth.

In South Australia, the Riesling Trail is perhaps the best-known rail trail. This trail is located in the Clare Valley, 130 km north-east of Adelaide. The trail passes numerous wineries and offers spectacular views from several points along the trail. The 35-kilometre-long trail allows visitors to experience the Clare Valley from end to end by foot or from the saddle of a bicycle. The idea for the trail is attributed to local business people (winemakers) who saw the potential for the disused railway line from Riverton to Spalding that ran through their region. While the closure of the railway in the 1980's was regarded as a major loss to the area, the conversion of the former railway corridor into one of Australia's best-known trails has benefited local businesses,



Various styles of interpretation have been used on the Old Beechy Rail Trail in Victoria to highlight the farming history, indigenous history, railway history and natural history of the region. An innovative feature is the use of rusty steel cut-outs. The steel structure pictorially illustrates timber cutting, farming history and other agricultural practices over the years.

as well as users. Local people named the trail after the grape that is so celebrated in the Clare Valley. Several wineries have created picnic locations along the trail. There are more than 30 bed and breakfast cottages, several hotel/motels and caravan parks close to the rail trail, enabling users to turn a comfortable one-day bicycle ride into several days. In November 2009, this already popular trail was extended another 8 kilometres north to Barinia Siding, the “geographic” northern end of the Clare Valley.

The Coast to Vines Rail Trail (34 kms) continues this very popular South Australian theme, connecting many of the vineyards of McLaren Vale. The trail offers scenic coast to hinterland views with spectacular vineyard vistas and changing landscapes.

Queensland currently offers Australia’s longest rail trail. The 161 km Brisbane Valley Rail Trail (BVRT) follows the disused Brisbane Valley rail line. The BVRT winds its way up the Brisbane Valley, traversing farmland, forests, picturesque rural settings and country towns. Being on the old railway line, the BVRT provides an off-road climb up the valley for day trippers, overnight camping or longer-term adventurers, but some sections can be more challenging. The final section of the trail was opened in 2018. There are also rail trails linking Kingaroy and Kilkivan, and Atherton and Walkamin. The Imbil Brooloo Rail Trail in the Mary Valley of the Gympie Region was recently opened. There is a short rail trail in Yeppoon. Current investigations looking at 7 rail trail proposals are being driven in part by the Queensland Government’s commitment of \$14 million over 4 years in the Queensland Cycling Action Programme.

The success of rail trails elsewhere in Australia can best be summed up by a recent quote about the Brisbane Valley Rail Trail in SE Queensland (which at 161km is currently the longest in Australia). Plans are afoot to spend \$2.2 million on its upgrading. Somerset Mayor Graeme Lehmann recently said *"The Brisbane Valley Rail Trail is a tremendous asset for the Somerset region. The trail is a significant economic driver for Somerset, boosting businesses, accommodation providers and tourism operators and building on the region's reputation as a destination for adventure-based outdoor experiences."*

The Brisbane Valley Rail Trail has been named Public Works Project of the Year (2019). Somerset Regional Council were recognised for its efforts in upgrading and maintaining the trail, receiving top award of Best Public Works Project (\$2 to \$5 million) for the 161km trail. The accolades were delivered at this year's Institute of Public Works Engineering Australasia Awards for Excellence. "It's our biggest tourism driver and a really significant part of the Somerset economy," Cr Lehmann said.

Who Uses Rail Trails and Why?

- ✚ Predominant user group is cyclists, ranging from elderly people, to baby boomers, young couples, family groups with children, teenagers and young children.
- ✚ Walkers and horse riders are also attracted to rail trails, but in far lesser numbers.
- ✚ Rail trails appeal to individuals, to couples, and to groups. A significant proportion of trail users on the Otago Central Rail Trail (South Island, New Zealand) are groups (school groups, sporting clubs, work groups, service clubs, social clubs, Over 50's clubs and organised tour groups).
- ✚ Some use rail trails for team-building, some use it for fitness training, others for a social club outing. Others cycle and walk a rail trail simply for the outstanding beauty and scenery that it provides.
- ✚ Users enjoy routes free from motor vehicles, routes that are away from the noise and smell of roads, and away from trucks and cars.
- ✚ All railway formations (through cuttings and along embankments) provide a gentle gradient and sweeping bends, suitable for all types of cyclists, walkers and horse riders.
- ✚ All rail trails offer safety for users compared with urban shared pathways which have driveways, light poles, blind corners and poor sightlines.
- ✚ Many users are attracted because of the railway heritage artifacts that remain (such as station buildings, bridges, turntables, signals and other signage, cuttings and embankments).

Survey of Rail Trail Users

A 1999 survey of users of the Murray to the Mountains Rail Trail in NE Victoria (by Professor Sue Beeton of La Trobe University) revealed that:

- Of the 128 respondents, 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%) travelled alone.
- The respondents were predominantly employed in professional and administrative positions (47% and 25% respectively) with 14% retired; however no respondents identified themselves as unemployed.
- Ages were varied, ranging from one year old to 79, with a slight majority of men (53%). 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.
- Half of the respondents had past experience in using rail trails and identified the Murray to the Mountains Rail 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.



Above: The Lilydale Warburton Rail Trail (Victoria) is about an hour from the Melbourne CBD. This proximity helps attract over 100,000 users per year.



Above: The Riesling Trail is South Australia's premier rail trail, travelling through the very attractive wine-growing country of the Clare Valley.



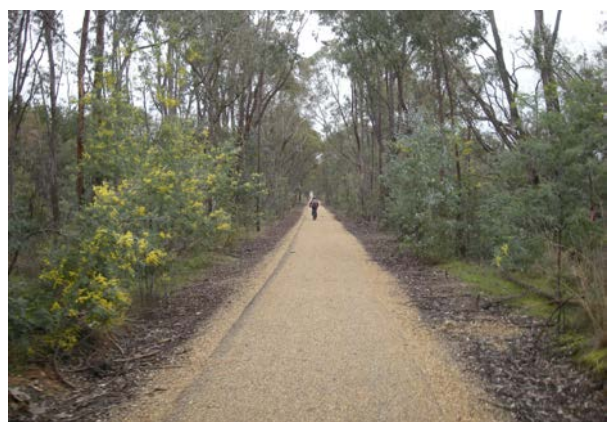
Above: The Sidings Rail Trail (WA) makes the most of existing historic rail infrastructure. This trail has two elements – as well as being a rail trail in itself, it is part of the Munda Biddi Trail – the long distance mountain bike trail between Perth and Albany.



Above: The Brisbane Valley Rail Trail (Qld) is being progressively developed. It attracts users from South East Qld, one of Australia's fastest growing regions.



Above: The Fernleigh Track in Newcastle is exceedingly popular with a range of users. One of its key attractions is the Fernleigh Tunnel.



Above: The Murray to the Mountains Rail Trail is one of Australia's highest profile rail trails; users are spending around \$250/day while using the trail.

SECTION 2 – THE CURRENT SITUATION

2.1 History of the Railway

One factor in determining whether a rail trail is feasible is knowing how/why the railway was originally established, why services stopped and the likelihood of a train service (or even tourist trains) being returned to the corridor.

The railway was originally designed for the area's farmers to move their cattle, sheep and produce. Like many railways throughout NSW, the actual route was determined by a combination of factors; namely the ease of construction (railways generally follow river valleys and avoid steep topography), the demand from farmers (who want ease of access to the railway for movement of goods and produce), and the location of towns (and the need for intervening sidings). Consequently, many railway corridors follow circuitous routes to avoid mountainous terrain and in order to service as many farmers as possible. As they were built in the era of steam locomotives the trains were usually relatively slow (as compared with modern day trains). Construction techniques of that era were relatively primitive, and tunnels and bridges were the result of hard manual labour. It is highly doubtful that any new train service, with fast trains, would follow much of the original corridor.

The first stage of this railway (between Queanbeyan and Michelago) was completed in December 1887. The extension to Cooma was completed in May 1889, to Nimmitabel by April 1912 and Bombala in November 1921.

Wikipedia provides an outline of railway services on the “Bombala” line (see https://en.wikipedia.org/wiki/Bombala_railway_line):

“The Bombala railway line is a partially closed branch railway line in the south of New South Wales, Australia. It branches off the Main South line at Joppa Junction, south of Goulburn, and was opened in stages to Tarago (January 1884), Bungendore (March 1885), Queanbeyan (September 1887), Michelago (December 1887), Cooma (May 1889), Nimmitabel (April 1912) and Bombala (November 1921).

On 26 March 1986, the line south of Cooma was closed.

Passenger services south of Queanbeyan ceased in September 1988. A bridge carrying the line over the Numeralla River at Chakola was declared unsafe so freight services south of Queanbeyan ceased in May 1989. However a special steam train service did operate through to Cooma a few weeks later, albeit without passengers over the bridge in question.

The 49 kilometre section between Queanbeyan and Michelago was also re-opened in April 1993 for heritage tourist operation by the ACT Division of the Australian Railway Historical Society. The line available for traffic was truncated to Royalla as it deteriorated, until finally being suspended at the beginning of 2007 as a result of storm damage.

The ARHS formally relinquished its lease on the Queanbeyan to Michelago section of track in 2011, and has subsequently concentrated its activities to boutique novelty trips for Canberra's population on the Canberra to Bungendore section of the line.

In October 1999 Freight Australia commenced operating log trains a couple of kilometres south of Queanbeyan to Hume. This freight though has now ceased also signifying the current operational end of the Bombala line.

At the Cooma end of the line, there is another heritage railway, the Cooma Monaro Railway, that was formed in 1992, when a group of local Cooma people decided to restore Cooma Railway Station. After the group had restored the station, efforts were then made by the group to acquire some rolling stock and re-open a section of track. This came to fruition starting in 1998, with over 17 kilometres of railway track reopened and restored CPH railmotors operating between Cooma and Chakola. Train movements though are currently suspended on this section of track, while the CMR tends to various new requirements of the Office of National Rail Safety Regulator.

At the Bombala terminus, a railway museum has been created, with a view to increasing local tourism. It is highly unlikely that a tourist train service will be instituted though, with vast tracts of rail missing between Bombala and the preceding station at Bukalong siding."

It is understood that the intention of a local Bombala group (Friends of the Bombala Railway Inc.) is to establish a 'pedal cart' operation between Bombala and Bukalong siding – a distance of 15km (involving several road crossings). Re-establishing any sort of train service on the track between Bombala and Bukalong will be extremely difficult due to the cost of acquiring rolling stock (and ongoing operations and maintenance), replacing the hundreds of metres of missing railway track between Bombala and Bukalong siding and the regulations in place governing tourist train operations and in particular the crossing of roads.

It is also understood a group is undertaking a feasibility study into running a 15km 'picnic train' between Cooma and Rock Flat.

Other local people have suggested other options for the corridor such as battery-powered golf carts on steel wheels (utilising the existing steel tracks).

Throughout Australia more and more tourist trains operations are failing or not commencing after initial enthusiasm due to a number of factors including the imposition of more restricted rules and regulations, the ever-increasing cost of operations, the diminishing revenues from users, the dwindling number of experienced and accredited operators and the problem of retaining volunteers so important to the running of these ventures. One local example of the high costs of heritage railways is the Canberra Railway Museum which ran heritage train services (the "City of Canberra" steam locomotive) until 2016. The ABC reported that the train consumes 18 tonnes of coal and some 40,000 litres of water on average each day, costing around \$10,000 a day to operate (<https://www.abc.net.au/news/2016-11-18/canberra-railway-museum-closes-doors/8037072>). A spokesman for the operation summed up the challenge succinctly "There is a reason railways don't operate steam locomotives — they are very expensive," he said. That service no longer operates.

2.2 Corridor Assessment

For the purpose of determining whether the entire corridor was suitable for a rail trail, or just some sections of it, the corridor was divided into 6 sections for assessment. These sections roughly equated to a one-day bike ride (for the novice or inexperienced cyclist or family group). These sections were based on the locations of existing towns or villages along the corridor, and

in the case of the lengthy distance between towns in the southern half, a siding (Jincumbilly) alongside a main road was chosen as a potential trailhead. The six sections are:

- 🚧 Queanbeyan to Michelago – a distance of 49km
- 🚧 Michelago to Bredbo – a distance of 30km
- 🚧 Bredbo to Cooma – a distance of 36km
- 🚧 Cooma to Nimmitabel – a distance of 38km
- 🚧 Nimmitabel to Jincumbilly – a distance of 37km
- 🚧 Jincumbilly to Bombala – a distance of 24km

Each section was assessed according to a set of criteria developed by the consultants (and used in several other rail trail projects). The perfect score would be 100/100. These criteria are:

- 🚧 Towns/villages (trailheads) at each end (incl. availability of accommodation, food/drink (and other services) – towns provide an essential service for users of trails to rest, replenish supplies or to be accommodated. (Score out of 10)
- 🚧 Potential landholder issues – many adjoining landowners are not favourably disposed towards the prospect of a rail trail, citing a range of factors that they imagine might inconvenience their farming practices or lifestyle. (Score out of 10)
- 🚧 Estimate of costs of construction (including difficulty of construction – terrain, access, type) – the higher the cost of constructing a trail, the harder it will be for the trail to provide a positive return on investment. Some sections of trail may be much more difficult to construct than others. (Score out of 15)
- 🚧 Scenery - the scenery as seen from the trail will greatly determine whether people come to experience the trail. Put simply, if it is boring, they won't come. (Score out of 10)
- 🚧 Railway remnants - rail trail users are excited by the prospect of re-discovering relicts and remnants of the railway era. Items such as bridges, tunnels, railway stations and sidings, railway signage, embankments and cuttings are what rail trail users expect to find and are the reason why rail trails are a unique attraction (Score out of 10)
- 🚧 Bridges - one of the most common and desirable features along any disused railway corridor is the number of remaining bridges, usually timber trestle bridges. In the case of this railway corridor, apart from the numerous timber bridges, it has a number of heritage listed bridges. However, some of the old timber bridges been removed. (Score out of 15)
- 🚧 Tunnels - this particular railway corridor has only one tunnel – many other disused railway corridors have none (Score out of 5)
- 🚧 Overall impression including user experience (suitability for development as a standalone rail trail) - we are in a favourable position to assess whether a disused railway corridor, or portions of it, are good enough to be converted into a trail for recreational use. Many factors influence our opinion, including all the factors noted above. In particular, we are very interested in whether an individual segment of the corridor has enough going for it to be worthy of becoming a stand-alone rail trail (Score out of 25)

In order from north to south, the sections were ‘scored’ as follows:

- 🚧 Queanbeyan to Michelago- score 79/100
- 🚧 Michelago to Bredbo – score 74/100
- 🚧 Bredbo to Cooma – score 72/100
- 🚧 Cooma to Nimmitabel – score 73/100
- 🚧 Nimmitabel to Jincumbilly – score 68/100
- 🚧 Jincumbilly to Bombala – score 60/100

The assessment sheets are included in this report at Appendix 1.

2.3 Feasibility Study of Possible Return of Rail Services

At the time of the preparation of this Feasibility Study into the viability of a trail being developed on the (currently) disused railway corridor, a Government-sponsored Feasibility Study into the possibility of a train service on the Queanbeyan Bombala railway corridor (and beyond to Eden on the coast) was being undertaken. At the time of this report being prepared no details about that train Feasibility Study have been released to the public.

As stated elsewhere, it is very evident that, should it be proven feasible that a train could be re-established on the corridor between Queanbeyan and Bombala, a trail could *not* share the same corridor as that train service. It is assumed (in the absence of any other information about the train proposal) that the train may utilise not just the same corridor as the disused railway line, but all of the bridges, the tunnel and all of the high embankments and deep cuttings.









Above left: An Emergency Marker sign on the Lilydale Warburton Rail Trail in Victoria. Above right: An Emergency Marker on the Kilkivan Kingaroy Rail Trail in Queensland. The post also has distance plates. These safety measures would be a component of the proposed Monaro Rail Trail – should it proceed.



SECTION 3 – COMMUNITY CONSULTATION

3.1 Inception Meeting

An inception meeting was held on 28 May 2019 involving staff of the Snowy Monaro Regional Council (SMRC) and representatives of the Friends of Monaro Rail Trail (FoMRT).

The following matters were discussed:

-  The consultants enquired about Snowy Monaro Regional Council's established / committed position on the rail trail proposal. SMRC staff indicated that while the rail trail proposal had been around for some time, it had come to the fore of Council's consideration after the Councils merger in 2016. One of the merged Council's early resolutions (October 2017) was to set aside money to look into the proposal in more detail. There is no formal resolution beyond committing funding to the study. Council's position on the rail trail is neutral; it wants to look at the proposal in detail hence the study. It was noted that Councillors from the southern part of the region were passionate about the proposal. It was also noted that many in the southern communities (Bombala and Nimmitabel) were passionate about the rail trail – businesses, other community members, some adjoining landholders – while other landholders were passionately opposed to the project. At the northern end, Councillors, and the community were less passionate about the project (for or against) although some businesses were strongly in favour.
-  There was some discussion on the proposed new railway line between Canberra and Eden and the Feasibility Study which was underway. The consultants re-iterated their position that it would be impossible to run rail-with-trail along the whole corridor if the train proved feasible and would be built on the same alignment (i.e. the old corridor). There was some discussion as to when the results of the Feasibility Study for the rail proposal would be available. June 30 was nominated as the deadline for the study but no one at the meeting was sure whether a report would be available at that time. (Subsequently no report has been made available as at September 30).
-  Council's position on the proposed railway line is that if the train proposal does not stack up financially, the rail corridor should be put to another good use.
-  Road crossings were discussed. It was indicated there are 6 major crossings (of the Monaro Highway); it was suggested that some of these could be avoided by taking the trail into towns and crossing in lower speed zones or by other means (such as culverts or underpasses).
-  SMRC staff confirmed that there had been no formal community consultation to date on the rail trail proposal. FoMRT have consulted informally with local businesses, chambers of commerce and positive landholders. The most common complaint to date had been the lack of communication – “no one has been to speak to us about the proposal” (landholders).
-  It was suggested that African Love Grass will emerge as a critical issue. It has so far been kept north of Cooma. Some landholders south of Cooma are concerned that the trail will spread the weed south of Cooma.

-  There was discussion on various tourist train proposals. It was acknowledged that it is highly unlikely the previous tourist train which ran from Cooma to Chakola will return to service, although some people in Michelago are very passionate about the return of a tourist train. A group has secured funding to look at the feasibility of running a tourist train from Cooma south to Rock Flat siding (a distance of 11 kms). One of the reasons this appeals to the group is that this section of the railway corridor was originally established as a “pioneer” railway meaning the corridor was unfenced and the rail line had no ballast – these two facts make it easier and cheaper to run a tourist train. There is a possibility this section could be a shared rail with trail experience.
-  FoMRT reported that feedback from its Facebook page is that people would want to ride the entire (213km) rail trail rather than sections of it. There was also a suggestion that packaging this rail trail with the East Gippsland Rail Trail and the South Gippsland Rail Trail (given their geographic proximity to the southern end of the proposed Monaro Rail Trail) would be a significant advantage. The view was expressed that the preliminary rail trail Feasibility Study had neglected the potential of the trail to attract users from Victoria.

3.2 Community Consultation Events

A series of Open Houses were arranged to discuss the proposed rail trail project with members of the community.







A Press Release and a ‘letter to adjoining landowners’ was prepared for the purpose of alerting the community to these consultation events. Approximately 500 letters were sent by the Snowy Monaro Regional Council to landowners within 100 metres of the railway corridor.

The dates and times of these sessions were:

-  Tuesday 23 July - 5.00pm – 7.00pm - Bombala (at Bombala Community Centre)
-  Wednesday 24 July - 5.00pm – 7.00pm - Nimmitabel (at Nimmitabel Community Centre)
-  Thursday 25 July 5.00pm – 7.00pm - Cooma (at Cooma Library)
-  Friday 26 July 5.00pm – 7.00pm - Bredbo (at Bredbo Community Hall)
-  Saturday 27 July 9.00am – 12.00 noon - Michelago (at Michelago General Store)

The Open Houses (or ‘drop in’ sessions) were designed to show the community what the rail trail might look like should it be built (see Appendices 2 and 3). The Open Houses were very “visual” – they included a display of the proposed rail trail using photos of the corridor as it currently is, together with artist’s impressions of what it may look like after construction of the rail trail. The display also included photographs from other rail trails showing various types of surfacing, fencing, businesses servicing rail trail users, types of trail users and a range of infrastructure elements commonly seen along rail trails. The Open Houses were also designed to show (and discuss) solutions for perceived problems, drawing on successful rail trails elsewhere in Australia and New Zealand. These images helped to explain what a rail trail is, what it may look like, the potential impact on adjoining farms, and the solutions to commonly held issues.






Six images were prepared. These were:

-  Colinton Tunnel – with a trail developed through the tunnel
-  Bridge over Bredbo River (south of Bredbo) – with re-furbished bridge and decking
-  Typical scenery south of The Peak Rd, Coonerang - with new double fencing and double gating
-  Typical scenery north of Mount Cooper Rd (south of Holts Flat)
-  Typical scenery north of Bukalong siding - with double fencing and interpretation
-  Michelago Station - showing new uses

Appendix 3 contains the “before” and “after” that were part of the visual display at the community consultation events.

As with all rail trail proposals, there was a mix of opinions within each community with many being totally supportive of the project and a few who were opposed to the proposal.

Attendance figures were as follows:

-  Bombala – approximately 10 - 12
-  Nimmitabel - approximately 12 - 15
-  Cooma - approximately 20 - 30
-  Bredbo - approximately 12 - 15
-  Michelago - approximately 30 - 40

Note: numbers are only approximate as not all attendees signed the attendance register.

The vast majority of those attending these community consultation sessions were supportive of the proposed rail trail, with many having experienced similar trails in other states of Australia or overseas (such as New Zealand).

Of those who did not support the proposal, it is fair to say that strong opposition came from only a few. It was surprising that there were more supportive adjoining landowners than those who were opposed. Of those adjoining landowners who stated they were opposed, it became clear that most wanted more information about the project and how it might impact on their farming operations or security. When shown solutions from other rail trails (via images displayed at the sessions) or when answers were clearly given to their questions, many landowners appeared to accept that their perceived issues could satisfactorily be dealt with.

There are adjoining landowners who have experienced rail trails elsewhere and therefore are well aware of the many benefits that a rail trail will bring to communities along the trail.

There were a few attendees who would prefer tourist trains to be returned or want the re-establishment of a passenger and freight train service (without appearing to fully comprehend the huge costs of such an undertaking).

Feedback forms were available for attendees to fill in before they left the consultation sessions, or to be taken away and returned at a later date. These have been summarised and comments appear in Appendix 4.

3.3 Snowy Monaro Council “Your Say”

Following the community consultation “Open House” events, there was a further opportunity for the community to contribute their opinions about the proposed rail trail. Between September 11th and October 2nd the questionnaire survey available at the Open Houses was made available on-line via the Council’s “Your Say” web pages.

509 responses were received, of which 95.9% supported the development of the rail trail, 3.0% were opposed and 1.2% were undecided.

The questions asked were:

Q1. Do you support the proposed Monaro Rail Trail?

Q2 and 3. Please provide an explanation for your response.

Q4. What issues should be considered in planning this rail trail?

Q5. If the trail was to proceed, should any of the surface be sealed?










Q6 and 7. Please provide an explanation for your response.

Q8. If the trail proceeds, what are your suggested topics or stories for interpretive signage, including suggested locations?

Q9. Is there anything else you would like to add?

The results of the survey were collated by the Snowy Monaro Regional Council and the results have been compiled into a 140 page document (which is included as Appendix 4 of Volume 2).

A cross-representation of **favourable** comments (i.e. an explanation for supporting the proposed rail trail) is as follows:

-  Great for tourism, fitness and development of the Snowy Region.
-  If the rail connection is not going ahead to Eden then the rail trail is a good option.
-  A very good use for an unused resource.
-  From my research and extensive travels and riding on many trails, they work economically for towns and villages. They also provide a vibrant place to socialise and enhance social wellbeing. Long term abandoned corridors provide nothing.
-  Rail trails are an excellent way of providing relatively safe cycling environments and are also a bonus to local tourism and business.
-  It is state owned infrastructure that should continue to serve the interests of the public: in this case their health and wellbeing.
-  Rail trails bring in tourists and money to the local community. They are lots of fun to ride.
-  Rail trails are a safe family friendly and interesting re-use of the old rail network/alignments.
-  Rail trails are a wonderful way for people of all ages to enjoy the outdoors and exercise.

- ✚ I have experienced other rail trails in Australia and around the world and appreciate the experience and the benefits they can bring to communities.
- ✚ It would provide an opportunity for long rides to small towns via a well mapped and relatively safe route.
- ✚ Rail trails are an awesome way to see the countryside. They are safe from traffic hazards, have a manageable gradient for beginners and are a family friendly cycling route.
- ✚ This is a highly scenic region for which current cycling option (Monaro Hwy) is incredibly dangerous. This would create significant cycle tourism in the region.
- ✚ This proposal will revitalise the region, provide active holiday options for families and those with disabilities, and turn a public asset from an idle liability in to useful and cost-effective public amenity.
- ✚ It is a win win. A great trail for walkers, runners and cyclists. Which at the same time will bring in much needed tourist dollars to local communities particularly during the traditional off- season.

A cross-representation of comments from those opposed to the rail trail (i.e. an explanation for not supporting the proposed rail trail) is as follows:

- ✚ I don't want the rail corridor to be decommissioned for a bike trail. Once lost as a rail corridor, it would be next to impossible to reinstate it for rail transport.
- ✚ It would be unwise for Council to spend ratepayers' money on 1) destroying what rail infrastructure remains, and 2) building new infrastructure that would need to be demolished should the freight and passenger rail proposal be approved.
- ✚ I live along the proposed trail and I'm concerned about privacy.
- ✚ I consider the route is too exposed to wind and extreme temperatures to be a viable recreational cycle route.
- ✚ Due to the mess that some riders and hikers leave. Because of no fences a lot believe your property is theirs and do what they like.
- ✚ I think the money spent on the trail could be better spent elsewhere. Only a small percentage of the population ride bikes so it won't benefit the majority.
- ✚ It's a waste of Council money, which could be better used for other local projects or community funding.
- ✚ Too many properties involved with many livestock issues.
- ✚ The section of rail line that has been used by the Heritage Rail Society needs to be retained for the line to reopen again for the community and tourists.
- ✚ This will be another way to access private properties and have the opportunity to steal! More rubbish will be left behind by users.
- ✚ Once the novelty wears off rate payers will be left paying for the up keep of something that will rarely get used.

On the matter of issues that should be considered in planning the rail trail, the wide range of comments made have all been taken into account in the preparation of this Feasibility Study – or will be considered further in the preparation of a detailed Trail Development Plan (should the decision be made to progress with the development of the proposed rail trail).

The issue of whether the trail should be sealed or unsealed has been described elsewhere in this report. (In summary, 36.7% stated that it should be sealed; 23.6% stated it should not be sealed; while 39.7% are undecided). The reasons for and against sealing are set out elsewhere in this report.

Respondents stated a vast number of potential topics for interpretation (should the trail proceed). Many would like to see attention focussed on the indigenous history of the Monaro, railway history, local flora and fauna, settlement history, geography and geology. Many more topics are mentioned and these will require greater attention at the time the trail is being constructed (should a decision be made to develop the trail). The matters highlighted in the community consultation will be a great foundation for those tasked with researching and writing the interpretive material at that time.

3.4 Landowner Concerns and Solutions

A number of what might be called generic issues and concerns were raised in both written feedback and in conversations at the ‘Open Houses’. It is likely that there are a number of other specific issues and concerns adjoining landholders in particular have that were not raised.

Table 2 presents a range of problems generally raised (most were raised in the five Open Houses) and some generic solutions (a photographic essay follows showing some of these solutions on other rail trails). The table and photos are provided as guidance; they do not substitute for detailed discussions with adjoining landholders over problems and specific tailored solutions – this should be part of the next phase of work (preparation of a detailed development plan) if the project proceeds.

In addition to this table of ‘issues’ and ‘solutions’, the Murray Local Land Service prepared a *Strategic Risk Assessment – Biosecurity Risk Associated with Rail Trails* for the 21km Tumbarumba Rosewood Rail Trail - which is currently under construction.

This report is available from various sources, including the Murray Local Land Services. On its web site (<https://murray.lls.nsw.gov.au/biosecurity/disease-control/rail-trail-biosecurity-risk-assessment>), the Murray Local Land Services states:

Murray Local Land Services staff were engaged to carry out this risk assessment as independent experts, and this is their independent view.

In completing this risk assessment, Local Land Services is not making a judgment on whether or not the proposal in question should proceed. The risk assessment is used by the proponent to engage with landholders as part of the development proposal.

This document can be used as a generic template when considering risks for rail trails or other similar developments. However, it has been specifically designed with the Tumbarumba-Rosewood Rail Trail in mind, and some of the risks and treatments may need to be modified accordingly.

This report is also available from the web site of the Monaro Rail Trail Inc (<https://www.monarorailtrail.com.au/reports>)



Above and below: two styles of crossings on the Otago Central Rail Trail in New Zealand.



Below: the farmer alongside Port Fairy Warrnambool Rail Trail (in Victoria) has complete control over gates and opens them when he needs to move stock and machinery across the corridor.





Above: Boot and tyre cleaning brushes on Denmark Nornalup Rail Trail in WA. Above right: boot scrubbers at campsite on Bibbulmun Track. Right: boot scrubbers are located at sensitive locations along Bibbulmun Track.

Table 2: Landowner Concerns and Solutions	
IMPACT / ISSUE / PROBLEM	SOLUTIONS SUCCESSFULLY USED ELSEWHERE / COMMENTS FROM EXPERIENCE ELSEWHERE
<i>Impacts on adjoining land owners' lifestyles</i>	
<p>Crime - Trespassing, vandalism and theft.</p> <p>Landholders often express a range of concerns in regard to the issue of trespassing on to farmland, especially where the railway corridor is remote from farm buildings and public roads.</p>	<p>Comments</p> <p><i>Crime</i></p> <ul style="list-style-type: none"> ○ Numerous studies have concluded rail trails do not generate crime. Research and anecdotal evidence suggest conversion of rail trails tends to reduce crime by cleaning up the landscape and attracting people who use the trail for legitimate reasons such as recreation and transport. ○ There have been no reports of trespassing, theft or vandalism on the Murray to the Mountains Rail Trail (Victoria) since the establishment of the trail. ○ The Clare Valley (South Australia) Riesling Trail has had 2 incidents along the trail in over 20 years of operation. One of these, a burglary, would have occurred regardless of whether the trail existed at the rear of the property. The other, an incident involving an unrestrained dog attacking stock in an adjoining paddock, is one that can be avoided by trail users following trail rules. ○ The Linville-Blackbutt Rail Trail (part of the Brisbane Valley Rail Trail in South East Queensland) had 2 incidents with trail bike access in almost 10 years, but these were easily dealt with by the local police. ○ The Rails to Trails Conservancy work in the USA includes dozens of testimonials from law enforcement officers in a number of jurisdictions confirming that the expected/perceived crimes simply do not occur. <p>Possible solutions</p> <p><i>Crime prevention</i></p> <ul style="list-style-type: none"> ○ The Right to Farm Bill, which will be put to NSW Parliament in coming weeks, will include new offences that could lead to trespassers being punished with up to three years' jail and fines of up to \$22,000. ○ Design solutions to minimise theft include installation of security (and additional) fencing and planting. ○ Trail design can eliminate overgrown vegetation and tall shrubs that minimises hiding places and creates long sight lines.

	<ul style="list-style-type: none"> ○ Security lighting at trail heads and parking areas adds security. ○ Emergency phone boxes and emergency vehicle access helps increase user security. ○ Keeping trail corridors clean and well-maintained increases sense of community ownership and ‘passive surveillance’ reducing minor crime such as litter, graffiti and vandalism. ○ Plantings of tree-lined corridors along parts deemed ‘vulnerable’ by adjoining landowners could also provide a way of reminding trail users to stay on the trail – these provide a form of visual fence. ○ Many trails have a signposted Code of Conduct as a means of reinforcing what is expected of trail users and highlighting inappropriate behaviour. ○ Prohibiting motor vehicle use (by regulation and design) reduces property crime. Locked management access gates are a proven method of restricting access on to a trail. ○ Volunteer or professional trail patrols ranging from informal monthly clean-ups and maintenance crews to daily patrols.
<p>Loss of privacy for adjoining landowners</p> <p>Often residences have been constructed in close proximity to the railway corridor. Landowners living near to or alongside the proposed rail trail anticipate that noise and reduction of privacy will occur.</p>	<p>Possible solutions</p> <ul style="list-style-type: none"> ○ Some effective design solutions are possible and have been used to good effect on other rail trail projects. Fencing and security screening are the obvious methods. ○ Re-routing the trail off the formation away from the affected residence onto an adjacent road reserve or elsewhere in the rail corridor. ○ Substantial additional vegetation planting to provide a visual barrier between the trail and the residence (while minimising ‘hiding’ places). ○ Installation of screen fencing to obscure views of houses from the trail.
<p>Land value devaluation</p>	<p>Comment</p> <ul style="list-style-type: none"> ○ What empirical evidence exists comes from the USA (<i>American Trails website</i>). The evidence is that rail trails positively add value to properties along their route. Research and anecdotal evidence suggest conversion of rail trails tends to either have a positive impact or a

	<p>neutral impact on land values. It is positive where land use is changing to more intensive uses (such as from rural production to rural living/rural residential). Single family residential property values along the Little Miami Scenic Trail (Ohio) were positively impacted by proximity to the trail (<i>Karadeniz 2008</i>). Properties along the Minuteman Bikeway and Nashua River Rail Trail (Massachusetts) sell for a higher proportion of the asking price and in about half the time that it took for houses in the general inventory (<i>Della Penna</i>). Properties near, but not immediately adjacent to the Burke Gilman Trail (Seattle) sold for an average premium of 6% while those immediately next to the trail sold for a minimal premium (around 0.5%). Neutral-to-positive expectations for property values were held by 87% of adjacent neighbours to the Luce Line Trail (Minnesota). In the same 1988 study, 56% of farm neighbours held that same view, as did 61% of suburban neighbours (<i>American Trails website</i>).</p> <ul style="list-style-type: none"> ○ The consultants are not aware of any documented evidence to suggest property values decrease.
<p>Stress and concerns about the impacts of trails on farmers lifestyles and incomes</p> <p>An element of uncertainty in both the short-term (until a decision is made) or the long-term (from rail trail operations)</p>	<p>Comments</p> <ul style="list-style-type: none"> ○ Any change is difficult and causes stress for many people, especially where it is a change to the way people have operated their businesses and lifestyles for many years. ○ All public infrastructure projects create stress and concerns for those who will be negatively affected (or perceive they will be negatively affected). The experience in rail trail projects elsewhere is that the problems that adjoining landholders believe will occur do not occur. They are managed primarily by ongoing consultation and good design. <p>Possible solutions</p> <ul style="list-style-type: none"> ○ Staging of the project so that landholders and the responsible committee can see how sections work and what problems and issues arise and then react accordingly in subsequent stages is one possible way to minimise the concerns of landholders (given that these concerns may be felt differently by different people in different parts of the corridor).

Impacts on farming practices	
<p>Threat of fire</p> <p>Landowners are often concerned about the possibility of increased fire risk along a rail trail with fires spreading unimpeded along the corridor and consider that additional fire protection will be required if the reserve is used for a rail trail.</p>	<p>Possible solutions</p> <ul style="list-style-type: none"> ○ Development of an effective fire management plan in close consultation with the local Rural Fire Service. ○ Areas of the trail deemed high fire risk can have more active management controls. ○ Trail closure during periods of fire bans – as occurs on other tracks in high fire areas. The Hume and Hovell Track (in southern NSW) is one example of the use of specific closures. Trails in fire-prone areas can be closed for the duration of the high fire risk season. ○ Smoking can be prohibited on the trail. Councils can declare the public area a smoke-free zone, just as it can with other public areas. (Note: trail users are usually people interested in healthy pursuits and are therefore predominantly non-smokers).
<p>Weeds</p> <p>There are weeds on the corridor at present and throughout the region – who will remove them and who will keep them under control.</p>	<p>Possible solutions</p> <ul style="list-style-type: none"> ○ Preparation of a regularly reviewed Trail Management Plan covering all maintenance issues prepared in advance of construction. ○ Focus of maintenance – erosion, vegetation regrowth, weed control and signage damage. ○ Division of maintenance into regular inspections and simple repairs and once/twice yearly programmes undertaking larger jobs such as vegetation control.
<p>Interactions between nervous livestock and trail users with dogs</p> <p>Farmers whose properties adjoin the corridor are often concerned at unrestrained dogs being allowed along the proposed rail trail and causing difficulties for their livestock.</p>	<p>Comments</p> <ul style="list-style-type: none"> ○ It is well recognised that people walking dogs is a pastime with considerable physical and mental health benefits. On other rail trails, some sections of the trail (notably within the urban areas) permit this activity. <p>Possible solutions</p> <ul style="list-style-type: none"> ○ On other trails, dogs are usually either banned altogether, or trail users are required by regulation to keep their dogs on a lead at all times. The Trail Manager may ultimately decide to allow dogs (on leads) within the ‘town’ area of the trail ○ If the rail trail is declared ‘dog free’, Council’s rangers could issue infringement notices and the offender can be fined.

<p>Interactions between nervous livestock and trail users on horseback</p> <p>Farmers whose properties adjoin the corridor are often concerned at horses being allowed along the proposed rail trail, potentially bringing in weeds via faecal matter and a range of bacterial diseases and causing difficulties for their livestock.</p>	<p>Comments</p> <ul style="list-style-type: none"> ○ Rail trails around Australia vary on whether they permit horses. Of the trails listed as open on the Rail Trails Australia website, some 75% do not allow horses (for a range of reasons). ○ The debate about whether horses carry weeds in faecal matter has been around for a number of years and is particularly topical in discussions about whether horses are allowed into national parks. There appears to be no agreed consensus (though some national parks managers are permitting horses). <p>Possible solutions</p> <ul style="list-style-type: none"> ○ This draft Feasibility Study makes no recommendations as to whether horses should be allowed on the trail. The impact on feasibility will be relatively low and it is more properly a decision for the community to make.
<p>General biosecurity</p> <p>There are concerns that the use of rail reserve by trail users will increase the risk of contamination of livestock.</p>	<ul style="list-style-type: none"> ○ Advice obtained by the proponents of the Great Victorian Rail Trail (in central Victoria) from the Department of Primary Industries (Victoria) was that a trail should not jeopardise the landowner’s ability to sign the National Vendors Declaration. The rail trail would be considered in the same way as any public thoroughfare would be. Farmers have no control over who uses and what is done on adjoining roads so they have ‘no knowledge’ unless they are notified (the Declaration specifies that “to the best of a farmers knowledge and from information they have control over that their livestock comply with the conditions on the declaration”). Trail users are no different to road users in that people may trespass onto private land but most are unlikely to cause significant damage, unless there is some malicious intent. Again, the farmer has to have some knowledge of this before the declaration is declared false. Cars and particularly tractors moving at high speed would disperse more dirt from roads and tracks than collective effort of numerous bikes (in particular). ○ The <i>Strategic Risk Assessment – Biosecurity Risk Associated with Rail Trails</i> is to be used as a generic template when considering risks for rail trails or other similar developments. However, it has been specifically designed with the Tumbarumba-Rosewood Rail Trail in mind, and some of the risks and treatments may need to be modified accordingly.

<p>Fencing of the corridor</p> <p>Farmers often believe that the rail trail project will result in them needing to pay for additional fencing.</p> <p>As much of the railway line (Cooma to Bombala) was built as an unfenced corridor, the railway reserve is generally still unfenced. Farmers have adopted their practices to suit – moving livestock and machinery across, moving vehicles across, developing watering points on both sides etc. Farmers often believe fencing will cause problems with farming practices and not fencing will create havoc with livestock / trail user interactions & liability.</p>	<p>Comments</p> <ul style="list-style-type: none"> ○ There will be sections that ‘dissect’ properties or are used by the adjoining landholder. This was raised by landholders in the Open Houses. <p>Possible solutions</p> <ul style="list-style-type: none"> ○ Fencing may be appropriate along railway corridor boundaries in some places and not in other places – this depends on a number of factors. Consultation with each adjoining landowner will be required. ○ The cost of fencing, where required, should be a project cost. Adjoining landowners may wish to be receive remuneration should they wish to erect the fencing to their standards (rather than contractors). ○ Vegetation lines may also act as “visual” fences if appropriate. ○ Replacement of fencing over time (as it wears out or gets damaged) would need to be part of the original agreement with adjoining landowners. Landowners in other projects have stated that they would not want to replace a fence that fell down (over time) as they would not originally want the fence and would not need the fence if the rail trail did not proceed.
<p>Splitting of farm paddocks</p> <p>Splitting properties and the resultant impact on farm practices (particularly getting stock to watering points).</p>	<p>Comments</p> <ul style="list-style-type: none"> ○ There will be sections that ‘dissect’ properties or are used by the adjoining landholder. This was raised by landholders in the ‘Open Houses’. <p>Possible solutions</p> <ul style="list-style-type: none"> ○ There are several options for dealing with “paddock splitting”. They involve providing fenced and gated crossing points for stock and machinery at appropriate locations as determined by the landholder and trail manager. ○ Another option to deal with watering points issue is to provide watering points (new water tanks or similar) on both sides of the corridor for stock (these could be provided by the project construction budget).
<p><i>Impacts of trail users</i></p>	
<p>Management of litter and toilet waste</p>	<p>Comment</p> <ul style="list-style-type: none"> ○ Some landowners whose properties adjoin a former railway corridor expect high levels of litter.

	<ul style="list-style-type: none"> ○ It has not been a problem elsewhere. The Lilydale Warburton Rail Trail (Victoria) is kept spotless, with little or no visible signs of litter. The Gippsland Plains Rail Trail was involved with Clean Up Australia Day, but their involvement was curtailed because they effectively had nothing to do. There was no litter to clean up. The Clare Valley Riesling Trail (in SA) is also litter-free. <p>Possible solutions</p> <ul style="list-style-type: none"> ○ Thoughtful placement of rubbish bins at trailheads on the trail. ○ Regular maintenance patrols by council staff or volunteers, or the trail manager. ○ While installation of composting toilets is one appropriate solution, these are costly and are generally recommended only where there are long stretches between towns. The costings for this project include placement of composting toilets along the trail route between towns.
<p>Farm safety</p> <p>Adjoining landholders can be concerned that farms are unsafe work places and people are being invited into such unsafe workplaces.</p>	<p>Possible solutions</p> <ul style="list-style-type: none"> ○ Good design and appropriate information (as discussed above) will discourage people from going off the trail onto farm property and thus placing themselves in dangerous work environments or in close proximity to unpredictable livestock. ○ Particular attention to the trail design issues around sites where agricultural buildings are close to the rail trail (some of these solutions are discussed above in the section on crime prevention).
<p><i>Trail Management issues</i></p>	
<p>Funding for construction</p> <p>A major concern for opponents to rail trails is “Who is going to pay for trail project?” How will it affect rates?</p>	<p>Comment</p> <ul style="list-style-type: none"> ○ Many Federal and State Government funding programmes are available for tourism/recreation projects such as trails. Numerous trails around Australia have been funded by major grants worth hundreds of thousands of dollars. ○ Major companies, such as mining companies, have contributed to trail projects. For example, BHP Billiton has contributed \$200,000 towards the Camperdown-Timboon Rail Trail in Victoria. ○ Volunteers and other low cost resources, including low risk prison crews, can be brought into trail construction and maintenance projects.

	<ul style="list-style-type: none"> ○ Entire construction costs for trails are rarely borne by local government, therefore there is minimal impact on ratepayers for construction (even though ratepayers do benefit directly from trails, and indirectly by visitors spending in the community).
<p>Liability – who is liable for the safety of users both on-trail and when they stray off-trail</p>	<p>Comment</p> <ul style="list-style-type: none"> ○ In recent years public liability has become a major issue right across the community. Trails are not immune from concerns related to liability, or from the resulting issues. Indeed, liability – who is liable and who will pay – is often raised as a potential ‘problem’ with rail trail projects. <p>Possible solutions</p> <ul style="list-style-type: none"> ○ Primary project partners must take responsibility and ensure that their role is clear and unambiguous. ○ Management body takes liability responsibility along the full length of the trail regardless of ownership. Farmers do not carry any additional liability. ○ Effective signposting at trailheads and access points indicating trail regulations and trail use rules and user responsibilities. ○ In respect of farmers’ general insurance, this has not been an issue in other rail trails. Fire management plans address the possible fire risk increase, while reports of theft of property have been virtually non-existent (as noted above). ○ Courts are increasingly ruling that people are responsible for their own actions, marking a different emphasis to that which occurred in the late 1990s/early 2000s when managing authorities were held responsible for inappropriate behaviour.
<p>Unauthorised trail users</p> <p>There are often concerns over whether motor bikes would use the trail</p>	<p>Comments</p> <ul style="list-style-type: none"> ○ Unauthorised access to the trail by users of cars, motor bikes, etc, is often stated as one the major concerns of adjoining landowners (it is also a concern of potential trail users). <p>Possible solutions</p> <ul style="list-style-type: none"> ○ Prohibit motor vehicle and motor bike use through motor vehicle exclusion barriers and effective signage at each road crossing

	<ul style="list-style-type: none"> ○ On the Lilydale Warburton Rail Trail, as with other rail trails in Victoria, a standard gate configuration has been designed for use at all road crossings and trailheads. The design allows unimpeded access by walkers, cyclists, people in wheelchairs, etc. The design is such that motorbikes cannot squeeze past the gate posts of the narrow maze. Access by authorised vehicles, such as management vehicles, adjoining landowners (where needed) and emergency vehicles is gained through an adjoining (locked) management gate. ○ Encourage reporting of vehicle/bike registration numbers of illegal users. Experience on the Murray to the Mountains Rail Trail was that motorbikes tended to use the same sections at the same time – enforcement was therefore relatively easy.
<p>Ongoing maintenance costs</p> <p>Who is responsible, who will pay, what effect will it have on rates?</p>	<p>Comment</p> <ul style="list-style-type: none"> ○ There are often concerns about the capacity of Council to maintain the trail. <p>Possible solutions</p> <ul style="list-style-type: none"> ○ Preparation of a regularly reviewed Trail Management Plan covering all maintenance issues (including fencing) prepared in advance of construction is critical. The plan will provide a clear definition of who is responsible for what. ○ Proper design and construction will minimise ongoing maintenance costs. ○ Focus of maintenance – erosion, vegetation regrowth, weed control and signage damage. ○ A clear definition of who is responsible for what. ○ Division of maintenance into regular inspections and simple repairs and once/twice yearly programmes undertaking larger jobs such as signage repairs, culvert cleaning or vegetation control. ○ Hazard inspection programme (to limit liability and to define maintenance activities).
<p>Environmental issues</p> <p>Who is responsible for environmental effects of rail corridor? Environmental issues include construction concerns – noise impacts on wildlife and vegetation destruction on rail formation.</p>	<p>Comment</p> <ul style="list-style-type: none"> ○ With respect to construction concerns, good trail design and appropriate construction techniques on a site-by-site basis can mitigate environmental concerns. Significant vegetation stands on the boundaries of the formation should be untouched – vegetation growing between the rails is likely to be removed during construction.

Responsibility for policing trail	Comment
<p>Adjoining landowners are often concerned about undesirable people using the trail and causing a nuisance</p>	<p>○ Rail trails do not attract undesirable people. Adjoining landowners need not be concerned about the typical trail users as they do not cause trouble. They are using the trail for a relaxing and enjoyable outing in an attractive environment, free of motor vehicles.</p> <p>Possible solutions</p> <ul style="list-style-type: none"> ○ Volunteer or professional trail patrols ranging from informal monthly clean-ups and maintenance crews to daily patrols. ○ Preparation of a regularly reviewed Trail Management Plan contains a clear definition of who is responsible for what. ○ Police and/or Council ranger patrols (including on bikes); or by trail manager on regular patrols.

SECTION 4 – DELIVERING ON AGREED COMMUNITY OUTCOMES

4.1 introduction

The Commonwealth Government, the NSW Government, and the Snowy Monaro Regional Council have prepared a number of community, planning and economic documents in recent times. Developing a rail trail on the corridor delivers on a number of the goals, objectives and actions of these documents. How a rail trail aligns with these broad outcomes is best shown under each broad goal (which are similar in a range of documents).

4.2 Economic Development

Rail trails provide an additional tourism asset to the communities through which they pass. This in turn creates a number of economic opportunities both for existing businesses and new businesses. Various planning and community documents prepared for the Council and the wider region include goals and actions around supporting and diversifying the existing economic base.

The NSW Government's *A 20-year Economic Vision for Regional NSW (July 2018)* identifies that tourism and hospitality is one of the industries driving the economic future of Regional NSW. It identifies that, in the future, Regional NSW's diverse and natural beauty will continue to draw domestic and overseas visitors, with opportunities growing for niche and personalised travel experiences championed by small and medium-sized businesses. It states that sustainable jobs growth will be supported by regions' endowments, created or natural. A rail trail is one asset which can provide more employment opportunities in tourism and hospitality by offering niche tourism experiences. The Vision specifically identifies investigating opportunities for converting underutilised public land and infrastructure to play a bigger role in attracting more domestic and international tourists as an action.

The *NSW Government's Tourism and Transport Plan 2056* highlights the need to expand the tourism fund to provide for cycling infrastructure including rail trails in recognition of the economic benefits of cycling tourism.

The *NSW Government's Visitor Economy Industry Action Plan 2030* was released in August 2018 and supports the Commonwealth Government's ambition to develop Australia's visitor economy industry. The Action Plan identified six focus areas – the two most relevant for a rail trail are "putting the visitor first" and "making opportunities to support growth". Putting the visitor first involves ensuring that every visit encourages visitors to keep exploring and returning to NSW. A rail trail certainly provides an opportunity for existing visitors to extend their stay to traverse some or all of the rail trail and provides an opportunity for visitors who come specifically to do the rail trail to extend their stay in a region, inspired by their experiences on the rail trail. Making opportunities to support growth includes the development of a nature-based tourism strategy (identified in the VEIAP) – a rail trail is a nature-based activity open to a wide range of visitors.

The *South East and Tablelands Regional Plan 2036* focusses on a number of priority growth sectors to diversify the economy and identifies tourism as one of these key sectors. One of the

Plan's goals is to ensure that the region's nature-based tourism attracts increasing numbers of domestic and international visitors.

The *Snowy Monaro Regional Economic Development Strategy 2018 -2022* includes a vision that the region develops as a year-round tourism destination. The Snowy Monaro 2040 Community Strategic Plan expresses a similar sentiment as a key strategy to achieve a vibrant and prosperous economy for providing opportunities for growth. The *South East and Tablelands Regional Plan 2036* also identifies the need and desire to make the region a year-round recreation destination.

The *Economic Development Strategy* identifies that the region offers only a limited number of activities outside the ski season and specifically identifies rail trails on the disused rail corridor as an early stage action to move the region towards providing all-year attractiveness. One of the other early stage actions is to investigate the opportunities to grow the day trip/short-stay market of Canberra and the NSW South Coast. The Community Plan also includes a strategy to capitalise on the region's proximity to Canberra (as well as Victoria and neighbouring NSW regions). The potential of the Canberra market in particular is further explored in Sections 7 and 10; development of a rail trail as recommended in the Economic Development Strategy as an early stage action will provide an opportunity to grow the Canberra market in particular, given the pre-disposition of the residents of Canberra to participate in outdoor recreation of the sort provided by a rail trail. The Strategy identifies the three key sectors of accommodation, cafes, restaurants and take-way food, and sports and recreation activities as "engines of growth" for the regional economy. It also identifies the sector of rental hiring, travel agency and tour arrangement services as being an "enabling industry" which provides key support to the engines of growth. A rail trail will provide opportunities in all of these sectors as has been the case with rail trails elsewhere in Australia and New Zealand (and the USA).

The *Snowy Monaro Destination Management Plan 2019* identifies that cycling and mountain biking continues to grow in popularity amongst travellers looking for outdoor adventures, noting that there has been a 22% increase in the number of domestic overnight visitors including a cycling experience in their itinerary in the last 5 years. The DMP identifies the rail trail as a way of adding product to the summer appeal of the region and recognises the benefits for each of the towns and villages along the proposed route. The DMP identifies the Monaro Rail Trail as a "game changer" (Game Changer 10), as does the *Destination Southern NSW Destination Management Plan 2018-2020* (as a Game Changer in projects associated with the theme of Riding the Southern Region).

A rail trail can undoubtedly deliver on the vision of making the region a year-round attraction with consequent positive flow-on effects to employment in a number of sectors already established to serve the winter market.

4.3 Attractive Communities

Quality recreational facilities, such as trail networks, can help create attractive places to live and visit. Walking and cycling are relatively cheap modes of transport. Trails also provide a low impact means of travelling through the landscapes and play an important role in connecting people with nature. Various planning and community documents include goals and actions around improving the attractiveness of local communities as places to live.

The NSW Government's *A 20-year Economic Vision for Regional NSW* expresses an approach which envisages more employment opportunities in regional NSW, which in turn retains and attracts younger generations and creates sustainable, thriving regional cities and towns. A rail trail is one asset which can provide both more employment opportunities in and create attractive cities and towns.

The *Snowy Monaro Regional Economic Development Strategy 2018 -2022* identifies a number of economic risks of relevance particularly around population decline and the ability to attract new workers, in particular to Bombala. The strategy identifies both a lack of "spousal" job opportunities and a potential lack of cultural, sporting and other social activities to attract new families. One of the strategies identified to rectify these situations is the provision of cultural, sporting and recreational activities to attract and retain families and workers to the region.

According to the Regional Australia Institute, one of the key population shifts back to regional cities in recent years are 'regional returners'. These are people aged between 25-44 who left Australia's regions as young adults, but are choosing to return home later in life, and a number are professionals with a mix of specialist skills. Lifestyle is one factor that makes regional areas like the Snowy Monaro region an attractive alternative to capital cities. A rail trail is part of this mix of lifestyle opportunities. A rail trail is one piece of infrastructure that promotes pedestrian and cycle connectivity and improves opportunities for passive recreation around existing natural and heritage assets. Various documents identify an aging population across the region particularly in towns traversed by the railway corridor. Combined with job opportunities, a rail trail will assist in attracting returning or new residents.

4.4 Healthy Communities

Rail trails are an accessible form of recreation. Trail-based recreation is generally free, self-directed and available to all people, all day, every day. Good quality, accessible trails encourage physical activity and improved health. Increasing recreational options for local communities will aid overall community wellbeing. The trail will encourage people to exercise. Participation in trail activities can improve physical and mental health, assisting with disease prevention particularly cardiovascular, musculoskeletal, respiratory, nervous and endocrine systems as well as reducing obesity, hypertension, depression and anxiety. Various planning and community documents prepared for all three levels of Government include goals and actions around improving the health of local communities.

The *National Disability Strategy 2010-2020* outlines a 10-year plan for improving life for people with a disability. The Strategy covers a number of areas; of most relevance is the provision of inclusive and accessible communities and the provision of opportunities to participate in what the strategy calls "civic life" including social and recreational life. A rail trail will cater for some with a disability – low gradients and smooth surfaces provide opportunities for those who have mobility issues in particular allowing free access to a recreation asset which provides experiences in the natural environment, and the cultural and historical heritage of the region.

The *NSW Government's State Health Plan 2018-2019* has, as one of its strategic directions, the very simple aim of keeping people healthy. As noted above, good quality, accessible trails encourage physical activity and improved health. Increasing recreational options for local communities will aid overall community wellbeing. A rail trail also provides an opportunity for

health providers such as local health groups, schools and other organisations to provide group-related activities promoting better health.

The *Snowy Monaro 2040 Community Strategic Plan* includes a key strategy to ensure that recreation, sporting and leisure facilities encourage all ages to live an active and healthy lifestyle. The *Cooma Monaro Shire Recreation Facilities Strategy Review (2014)* includes objectives of maximising recreation opportunities and providing access to recreation facilities for pedestrians and cyclists. A rail trail is a relatively low-cost option for providing a recreation (and sporting) facility accessible to a wide range of people.

SECTION 5 - ISSUES

A project of this magnitude is not without a number of issues. None of these are insurmountable, but consideration has been given to the following:

- ✚ Possible future railway;
- ✚ Potential other uses of the corridor;
- ✚ The merits of a long trail versus a series of shorter rail trails;
- ✚ Landholder concerns and issues;
- ✚ Bridges: river and creek crossings (and overhead bridges);
- ✚ Fencing;
- ✚ Distances and services on the corridor;
- ✚ Aesthetics on the corridor;
- ✚ Costs – construction and maintenance; and
- ✚ Stakeholder positions.

The following issues have been considered in determining the feasibility of the proposed Monaro Rail Trail:

- ✚ **Possible future railway.** The RFQ states that during the preparation of the rail trail Feasibility Study consideration will need to be given to the possibility of accommodating both the proposed rail link between Canberra and Bombala and the proposed rail trail.

Currently, consultants are engaged in determining the feasibility of re-opening the Queanbeyan to Bombala railway line to trains and extending it to Canberra Airport in the north and the Port of Eden in the south.

An earlier Feasibility Study estimated the cost of redeveloping the infrastructure, including new bridges, refurbishment of other infrastructure (including rail line and sleepers etc), acquisition of land for a new railway corridor (where required) would be in the order of \$2.9 billion. The expected date of the current Government-funded Feasibility Study is not known but is expected to be during the timeframe of this Monaro Rail Trail Feasibility Study. It is not yet known whether a completely new corridor is being investigated (to replace the old and circuitous route designed for trains of the early 20th Century), or whether some sections of the current railway corridor alignment can be utilised.

A "rail with trail" is sometimes achievable along some sections of any railway corridor if the corridor is wide and generally flat though it is likely to reduce the enjoyment of some trail users. As a minimum, a 1.8 - 2.4m high barrier fence would be required to separate trail users from the active train line. This is a very expensive option when considering a 200+ km rail trail.

More importantly, the sharing of infrastructure such as bridges and tunnels is simply not practical. New bridges would need to be built to accommodate either the train or the trail as the two uses cannot utilise the same bridge (the existing bridges may not be in good enough condition to carry a train so they may need replacing for a train line).

The Colinton tunnel (which exists on the rail corridor) would need to be bypassed by the rail trail in some way. Duplicating these major infrastructure items will be a very high cost for the project and most certainly undermine the attractiveness of the corridor as a possible rail trail. The trail proponents will need to consider this likely expense. Cuttings and embankments also present significant design challenges to allow both uses of the rail corridor. In summary, an operating railway line along the corridor would significantly detract from the user experience without significant expenditure to replicate the very experiences rail trail users seek - bridges, tunnels, embankments and cuttings.




The old siding building at Bukalong would be the destination for pedal cars, should the plans of the Friends of Bombala Railway Inc. ever come to fruition. The building would need renovation if a rail trail was to be developed (and could be useful as a toilet and/shelter).

Potential other uses of the corridor. As noted earlier, a number of ‘tourist train’ operations have been conducted on parts of this disused railway corridor. They have been discontinued for a variety of reasons, presumably the cost of operations, limited revenue, insurance costs, and the requirements of the Office of the National Rail Safety Regulator have been amongst them. There is talk of a Cooma to Rock Flat train service, and the Friends of the Bombala Railway hope to run a ‘pedal cart’ operation to Bukalong siding. The Friends of the Bombala Railway currently runs an informal museum at the Bombala Railway Station and the Cooma Monaro Railway Inc also operates an informal rail museum at the Cooma Railway Station precinct. Both groups have an enviable collection of railway artifacts within the station grounds, have intact Station Buildings and have assembled various historic railway-related artifacts. Of crucial importance to the establishment of the proposed rail trail is the ambition of each group to operate some sort of ‘train’ service (even though it may be limited in extent and confined to within the station grounds).


Given the considerable costs in refurbishing railway track (including replacing steel track and sleepers, repairing/replacing bridges, etc), the cost of acquiring and restoring suitable railcars, the considerable cost in operating a train service and the cost of maintaining the train and the track, it is unlikely that these group’s ambitions of running train services over lengthy sections of the former railway will be realised.

Tenure and land ownership. The railway corridor remains in public ownership. However, field investigations reveal that much of the corridor – especially that section between

Cooma and Bombala which was never fenced – is grazed by cattle and sheep. Consequently, a change to the status quo will have considerable consequences for neighbouring farms along the corridor. However, the design of the trail (utilising specially designed gating systems and/or underpasses) can avoid these concerns. In addition, the fenced rail trail need not take up the entire 30 or 40 metre wide reserve – it can be fenced to a narrower width enabling the adjoining landowner to continue grazing the remainder (i.e. un-needed portion) of the railway corridor.

 **Landholder concerns.** As is the case with virtually all rail trail projects, adjacent landowners are, understandably, apprehensive about trails close to their properties. It is important that these concerns are seriously addressed before any trail conversion takes place. Many landholders resent having things imposed on them or feeling as if they have no say in what is happening around them. Many landholders are resistant to change of any sort, let alone one they perceive will have detrimental impacts on their lifestyle as well as on their farming operations. It needs to be appreciated that opposition will never completely cease – some people will never be convinced, despite a plethora of testimonials from people in very similar situations. Issues that have been raised already during this project and others that may be raised in the future are included throughout this report. Conversely, adjacent landholders who understand and support the reasons behind a trail, and who see that the trail is going to be well organised and efficiently managed, will prove to be extremely valuable partners in years to come. Indeed, some of them will take advantage of business opportunities offered by the rail trail project. It is important to note that virtually all issues raised by adjoining landowners have been raised many times elsewhere (in the 2,100+ rail trails operating in the USA and the 100+ rail trails in Australia) and appropriate and successful solutions have been devised. Landholder consultation always raises a number of issues, all of which have been satisfactorily addressed in other rail trail projects in Australia, New Zealand and America. Issues tend to centre around a number of key elements within three major headings:

- Farm management, disruption to farming practices and biosecurity concerns;
- Non-farm management issues. These are generally concerns around safety, security privacy, theft, trespass, noise, disturbance and a range of related issues; and
- Trail management. These are generally concerns around maintenance, and the behaviour of trail users in regard to littering, toileting and other issues.

 **Bridges: river and creek crossings (and overhead bridges).** Bridges can be regarded as both an “issue” and an “opportunity”. Bridges are one of the most obvious reminders of the heritage value of disused railways, one of the most significant attractions of trails along disused railways and also one of the costliest items in the development of trails on former railways. When operating as a railway there were over 90 bridges along the corridor between Queanbeyan and Bombala, and hundreds of culverts (including timber, brick and pipe culverts). The length of these bridges ranges from 3 and 4 metres up to 390 metres. In total, the length of these bridges is in excess of 1,900 metres. Bridges on this corridor cross rivers and creeks, standing water, waterways that have water in them at certain times and roads and stock access points. While a quick visual inspection of those that can easily be seen (or reached via a short walk along the

corridor) revealed that most appear in a satisfactory condition for future use as a rail trail, many were not. Several bridges are now missing (including the bridge across Burra Road in Michelago and across Arnott Street in South Jerrabomberra (in the Queanbeyan Palerang Regional Council area).

The 390m long bridge over the Numeralla River (north of Chakola) is in a particularly dilapidated state, with many of the timber piles having sunk into the sandy floodplain, causing the railbed to twist and bend. The cost of repairs to this bridge alone will be substantial.

Replacement and re-purposing costs are one of the considerations for rail trail bridges. Work on other timber rail trail bridges across Australia have returned costs of between \$6,000/lineal metre up to \$13,000/lineal metre.




The 390m bridge over the Numeralla River is seriously deteriorated and will require complete refurbishment, even for use for cyclists and hikers. Use by trains is impossible without replacement.

Unfenced railways and the need for fencing. As noted earlier, the railway between Queanbeyan and Bombala was built in several stages. The earliest stages, between Queanbeyan and Cooma, were built as a fenced railway, with ballast. The last phase, between Cooma and Bombala, was built as an unfenced railway, and without ballast. Farmers have adopted their practices to suit, utilising unlimited access to and across Crown land. They regularly move livestock, machinery and vehicles across the corridor. They have developed watering points on one or both sides of the corridor. Farmers often believe fencing will cause problems with farming practices and not fencing will create havoc with livestock/trail user interactions, liability etc. They also express a concern that a rail trail project will result in them needing to pay for the new fencing. Fencing of the corridor is one of the most important, and expensive, components to the future success of any rail trail. As a general rule, rail trails pass through a considerable amount of farmland, and it is critical that the entire rail trail corridor be fenced on both sides where it passes through farms. Fencing along a rail trail is required for several reasons:


- To prevent unauthorised access onto the rail trail;

- To prevent authorised trail users (cyclists, walkers, horse riders) from attaining access onto adjoining properties, and to prevent unauthorised trail users (trail bikes, etc.) from illegally trespassing onto private property;
- To minimise disturbance of stock by trail users;
- To prevent encroachments by adjoining landholders;
- To delineate freehold (private property) from Crown land and to minimise encroachments and trespassing, unintended or otherwise;
- To prevent stock from straying (recognising that it is the land owner's responsibility to ensure stock does not stray); and
- To keep stock off the rail trail and away from trail users.

Consultation with each adjoining landowner will be required to tailor specific solutions. The cost of fencing, where required, should be negotiated with each individual landowner during the one-on-one consultation process. One of the options to maintain the corridor (as opposed to maintaining the actual trail) is to allow adjoining or adjacent landholders grazing permits over those parts of the corridor not required for a trail (a 6 - 8 metre envelope incorporating the trail on the railway formation). As the original railway corridor is generally 30 – 40 metres wide, the excess corridor can be leased to adjoining landholders. This approach will minimise the reduction in land that they currently farm and enable stock to 'maintain' the corridor outside of the fenced trail corridor (noting that some landholders already have stock on the corridor). While this creates a capital cost, it has the potential to significantly reduce maintenance costs.

 **Unauthorised and informal use of the corridor.** The railway corridor is currently managed by the John Holland Group (a subsidiary of The China Communications Construction Company) and owned by the NSW Government. The John Holland Group has the responsibility for access to the disused railway corridors of NSW. Any person or entity wanting to access the corridor needs to go through an administrative process (including rather onerous workplace health and safety processes) before permission is granted. John Holland receives from the NSW Government a per kilometre rate to maintain the corridor.

During fieldwork associated with this Feasibility Study, it was noted that adjoining landowners have unrestricted access to the disused corridor, using it for general farming practices (including storage of equipment and sheep/cattle grazing). If the trail proceeds, the trail manager (whichever entity is enacted) is likely to be given an overall lease for the corridor and will be required to deal with these unauthorised and informal activities. There is scope within the rail corridor to provide access for landholders so negotiated solutions are possible.

 **Removal of rail.** The steel railway track is (mostly) still intact and will need to be removed to allow the trail to be constructed, though some of it should be left intact within the Michelago, Cooma, Nimmitabel and Bombala Station areas and perhaps some distance within each station ground (a distance to be determined) to allow for the possible future establishment of heritage rail services should the relevant organisations find the necessary resources and obtain the necessary permits and accreditation.

Depending on the timing of construction of the proposed rail trail, removal of the steel track and sleepers could be a project cost (the cost of which will be influenced by the

price of steel at the time of removal). The trail proponent/manager will need to, at the time of trail development, seek tenders for the removal of the steel track and sleepers. It should be noted that the Snowy Valleys Regional Council has successfully negotiated a fee for the removal of the track between Tumberumba and Rosewood, NSW's 'pilot' rail trail project which is currently being constructed.

- ✚ **Clearing.** As the majority of the corridor has been disused for many years, there has been some regrowth of vegetation – especially where the corridor has not been grazed by stock from adjoining farms. While most of it is light regrowth, some significant regrowth has occurred. This will influence the cost of developing the trail.




Clearing of the rail trail corridor, although minimal in most locations, is one of numerous items to be factored into the overall cost estimates.

- ✚ **Drainage.** Construction of the railway involved the cutting and filling of the landscape to create a surface that was relatively flat to enable the passage of steam trains. The result was a series of cuttings and embankments along the entire length of the rail corridor. Effective drainage will be required, especially within cuttings to ensure stormwater is quickly and effectively removed from the sides of the trail (as it was when the trains were running). Particular care must therefore be given to reinstating the side drains through any cuttings. Regular cleaning of culverts under the railway formation is also essential. Additional pipe culverts may be advantageous in some locations.

- ✚ **Costs – construction and maintenance.** Costs – both capital and maintenance – are a major consideration in any public infrastructure project. These need to be offset against a range of benefits – both economic and non-economic. Broad cost estimates are a part of this project, but reliable and detailed cost estimates would be prepared as part of any future trail development plan (which would involve a complete traverse of the entire corridor by foot or vehicle). However, the Council needs to have some understanding of the possible construction and maintenance costs.

Ongoing trail maintenance is a crucial component of an effective management programme – yet it is often neglected until too late. Ongoing maintenance can be minimised by building a trail well in the first place. A well-constructed trail surface will

last considerably longer than a poorly built trail. Evidence of actual trail maintenance costs for individual items along a rail trail, or any trail for that matter, are scarce. It is difficult estimating the costs involved in maintaining a trail until every last bridge and other infrastructure items have been installed.

 **Trail surface.** The survey undertaken during the preparation of this Feasibility Study revealed that there is mixed opinion on whether the surface of the trail should be sealed (i.e. bitumen or asphalt) or left unsealed (i.e. compacted gravel or limestone). 36.7% of the 504 respondents stated that it should be sealed; 23.6% stated it should not be sealed; 39.7% were undecided. Each has its advantages and disadvantages. Notably, a sealed surface will cost more to construct but would attract a wider range of users and therefore more users. A sealed surface would be cheaper to construct but may result in fewer users (as ‘road’ cyclists may not use it).

Most rail trails developed in Australia use a locally available earth surface (gravel, decomposed granite, crushed limestone, etc.) to produce a firm surface easily capable of accommodating walkers and cyclists. Use of such material provides a high-quality natural surface without the expense of a hardened (i.e. sealed) surface.

There are some good arguments for sealing the surface of rail trails – users on road bikes are able to use such a trail and they are more accessible for people in wheelchairs and other small wheeled ‘vehicles’. The very successful Murray to the Mountains Rail Trail (Victoria) is a sealed trail as is the Amy Gillett Rail Trail, the Coast to Vines Rail Trail (both in South Australia) and the Fernleigh Track in NSW. Usually, the costs of putting down a hard surface and the aesthetics of a hard surface are arguments against a hard surface though there are some proponents who claim that the capital and maintenance costs of a sealed surface are compatible with the costs for an unsealed surface.

Alternative surface treatments may also be worth exploring. A number of liquid polymer modified bitumen composition products are currently available and the proponents have indicated that this surfacing treatment can be delivered at a similar cost to a compacted natural surface. Proponents have argued that the two key advantages are that the products reuse the ballast and therefore it does not need to be removed from site and that as a harder wearing surface it has a longer life.

The Rails to Trails Conservancy Service (the American rail trails advocacy group) offers some general guidance. Non-asphalt trails require significant re-grading or resurfacing twice as often as asphalt trails (9 years vs. 17 years). A simplistic cost approach would then say, if asphalt is less than twice the cost, it is a more cost-effective, long-term choice. At least one other area of consideration should be suitability to purpose. In this regard, there are three factors that come into play:

- Volume of use — high volumes of use will arguably have a greater impact on non-asphalt trails, although there are numerous examples of well-constructed non-asphalt trails that hold up well under relatively high use.
- Types of use—different trail surfaces will be better or worse for different activities. How do you expect the trail to be used? Are there any uses you specifically want to include or exclude?

- Setting — asphalt may be more fitting for an urban setting than a rural setting. There is also the need to consider environmental and aesthetic factors such as the need to be consistent with a natural or historic setting.

Unfortunately, there is no research that indicates how much extra use a sealed trail attracts (as opposed to a natural surface).

Road Crossings. By necessity the original railway route twisted its way across the landscape and crossed numerous roads, often at grade. It is interesting to note that several roads were built subsequent to the development of the railway, or existing roads upgraded to take account of the new railway. Grade separation of the railway/road occurs at several locations. Where the railway crossed the road (such as the several locations along the Monaro Highway) all traces of the at-grade railway crossing have been removed.

Should the entire rail trail proceed, there will be approximately 40 - 45 road crossings between Queanbeyan and Bombala, ranging from at-grade crossings of the Monaro Highway to numerous smaller gravel roads and minor tracks that provide access to businesses, houses and homesteads.

As is the case for other existing rail trails in Australia, underpasses could be constructed to avoid any conflicts between motor vehicles on the Monaro Highway and users of the rail trail. Locations of at-grade crossings, and underpasses where appropriate, would need to be carefully chosen.



Despite the fact that numerous rail trails throughout Australia cross busy roads at-grade, bringing the road crossings into lower speed zones, and closer into towns/villages, will make these crossings even safer.



Approximately 40-45 roads cross the disused railway, including this crossing at Williamsdale.

Ongoing legislative issues. There is currently no clear direction from the NSW Government that it will provide funding and support for additional rail trail projects in NSW, despite legislative and administrative processes being developed to enable the Tumbarumba Rosewood Rail Trail (part of the former Wagga Wagga to Tumbarumba

railway line) to proceed as a 'pilot' project. As stated elsewhere, closure of the railway by an Act of Parliament will be required prior to development of the Monaro Rail Trail.

-  **Stakeholder positions.** While management arrangements for NSW rail trails will likely be based on the model established for the 'pilot' rail trail project (the Tumbarumba Rosewood Rail Trail), there is no doubt that Local Governments are and will be a key player in ongoing management. The Snowy Monaro Regional Council's support for a rail trail is partially dependent on the outcomes of this study and a clear articulation of costs and benefits, as well as the outcome of the Queanbeyan-Bombala-Eden railway Feasibility Study. The community groups that have come forward prior to this study and in the course of the study have indicated a very strong support for the proposal. There is an active Friends of Monaro Rail Trail group which raises funds, commissions reports, prepares newsletters, attends meetings and a host of other activities.
-  **Extremes of temperature.** The Monaro region climate is characterised by extremes of weather (compared to other places in Australia). Temperatures can soar above 40 degrees in summer and fall well below freezing in winter. Sudden changes in weather can occur and potentially can impact on the safety and well-being of trail users (and others engaging in outdoor activities) though outdoor recreational activities are common in the region across the seasons. There are mechanisms whereby trail users can be advised not to undertake a trail journey if weather conditions are unfavourable. Publicity information (on web sites, in trail brochures, on trailhead signs and information at visitor centres) can be disseminated to potential trail users advising/warning of adverse weather conditions. Trails can be closed at times, when deemed necessary by the trail manager. However, it would be prudent to plan for hazardous conditions by the building of trail shelters (and water supply) at key locations and at regular intervals, and by emergency warning signage (indicating road name, location, distance to shelter, and GPS coordinates).
-  **Queanbeyan Palerang Regional Council.** The Queanbeyan Palerang Regional Council (QPRC) is not a participant in this Feasibility Study. It is understood that although the QPRC has given the SMRC in-principle support to undertake the study there may not be the support for the trail construction.

SECTION 6 - OPPORTUNITIES

Rail trails also provide several notable opportunities. There are a number of specific elements within the area encompassed by the proposed trail route that provide opportunities and reasons for why a trail should be built.

6.1 The Opportunities

- Distances and services on the corridor.** One-way trails (or out-and-back trails) need an anchor at both ends to be attractive to users. The best one-way trails (including many rail trails) have natural terminuses in major centres or towns or pass through major towns. The proposed 213km rail trail does offer this opportunity. Distances between towns/villages along the disused railway corridor are very good for enabling easy one-day bike rides for most cyclists (but long days for those walking). Trail segments are likely to be between 30km and 49km. The only exception is at the southern end, where there is a distance of 61km between Nimmitabel and Bombala (although this situation could be improved by the establishment of a trailhead at the Jincumbilly siding, by enterprising nearby landowners setting up accommodation options, or by others setting up a shuttle service to transport people and bikes to Bombala or back to Nimmitabel).



Elements of the remaining infrastructure include bridges, sidings, switches and, in some locations, the original stations, signals and distance pegs.

- Appealing landscapes and infrastructure.** The proposed Monaro Rail Trail would pass through extremely attractive scenery. Magnificent views to the nearby Tinderry Range or Snowy Mountains are ever-present, and undulating topography is constant along the corridor. Even the wide, open treeless plains are a feature uncommon on other rail trails, but equally stunning to potential visitors to this region. Views of sheep or cattle grazing in adjoining paddocks adds to the interest. The landscape through which this disused railway corridor passes would have to be amongst the most attractive in Australia, and certainly one of the most picturesque landscapes for a trail.

Infrastructure along the railway corridor is almost complete. Railway station buildings and even siding sheds and platforms remain; most bridges remain; distance pegs,

signals and switches remain in most places. Turntables exist at the Michelago, Cooma and Bombala station grounds. Embankments and cuttings are a common feature. What seems to be missing are various railway signs including speed limit signs and “whistle” signs. Few were observed. All these elements of the original railway would add to the enjoyment of trail users, should the trail be developed.

- ✚ **Aesthetics on the corridor.** Despite the fact that some of the disused railway corridor runs alongside sections of the Monaro Highway, this does not diminish the attractiveness of the corridor. The railway is often set below the level of the nearby road, and traffic on the Highway is barely noticeable. Often the railway corridor (or adjoining road corridor) is still well vegetated, especially in the hillier, northern parts. This proximity however does have its benefits, enabling easier access to the proposed rail trail (for construction purposes, and for ease of access on to and off the proposed trail, especially in an emergency situation).
- ✚ **Topography of the route.** One of the major appeals of rail trails is the gentle gradient, suitable for all types of cyclists and walkers. This is the market that would be attracted to a rail trail. Although the Monaro region is typically undulating, with several ranges of hills near to the railway corridor, the corridor itself is reasonably flat (having been constructed originally for steam locomotives mostly along river and creek valleys).



The Michelago Railway Station would make an excellent trailhead, although it is preferable to have the northern terminus of the proposed rail trail at Queanbeyan Railway Station.

- ✚ **Connections between towns.** Taking trail users through towns will provide new business opportunities for service providers. Presently, there are good opportunities for potential trail users to get accommodation, food and drink, and other services at the towns through which the proposed rail trail will pass. Development of the rail trail may provide a range of new business opportunities (or allow existing businesses to expand). The trail will make an actual connection between the towns and villages en route – one that reinforces historic connections.



- 📍 **Connection to Queanbeyan.** The fieldwork undertaken during the course of the project has revealed the large amount of urban development occurring within the Queanbeyan Palerang Regional Council area, especially immediately alongside the disused railway corridor at South Jerrabomberra. This development alone would benefit enormously from construction of a trail/path into Queanbeyan, and beyond into Canberra via the existing shared path and on-road cycle routes of the ACT. It would make good sense to make Queanbeyan (most likely the Queanbeyan Railway Station precinct) as the northern terminus for the proposed rail trail, given the population of Queanbeyan and the connections into the ACT cycle and pedestrian networks.



The Friends of the Bombala Railway Inc have done an outstanding job of preserving infrastructure at the Bombala Station. They should be encouraged to continue this work, even if their plans to have pedal carts to Bukalong siding never eventuates.


- 📍 **Broadening the recreation offerings.** Provision of an additional off-road trail adds to the list of tourist offerings in the region and encourages visitors to stay a little longer to go for a pleasant walk or ride. A new nature-based attraction has the power to retain those visitors for longer, spending money and generating business opportunities. *The 2013 Snowy Mountains Experience Implementation Plan (TRC Tourism)* recognises that there is a great opportunity in attracting the 39% of visitors who only come in the snow season to return at other times. The Plan notes that a high proportion of winter visitors have an interest in active recreation, outdoor activities and new adventure experiences. The Plan identifies that this market often has a reasonable level of disposable income and is prepared to pay for good product. *The Snowy Monaro Regional Economic Development Strategy 2018 -2022* builds on this recognition, including a vision that the region develops as a year-round tourism destination. A rail trail will add to the stock of “off-season” recreation offerings in the same way that mountain bike trails in the Snowy Mountains currently do. Other recent studies in the region have also identified specific projects to expand the all-year round offerings for outdoor recreation. *The 2016 Cooma Trails Master Plan* (by Dirt Art) and two reports on the Lake Jindabyne Shared Trail Project both are premised on developing recreation trails to broaden the attraction

of the region (both of the Cooma sub-region and the Jindabyne sub-region). A rail trail would add yet another outdoor recreation activity for cyclists (albeit attracting slightly different markets).


-  **Community support.** The consultants have met with several business owners and adjoining landowners and have conducted five community consultation sessions (“Open Houses” – see Section 3.2). Judging from those conversations and the number of orange bikes displayed in shop windows (and in one location actually on the disused railway), and stickers expressing support (also displayed in shop windows) there does appear to be a ground swell of support from groups and individuals within the surrounding communities. It is also evident that there are strong advocates within the communities who have expressed a desire to get more involved in ensuring the proposed rail trail gets developed.
-  **Friends of Monaro Rail Trail.** A committed community-based group is an important element in a rail trail’s success. The existing ‘Friends of’ group has been around for a number of years and has undertaken numerous activities and fundraising to help promote the development of the trail. It funded the previous Pre-feasibility Assessment and has provided input to this study. This commitment can be tapped into to ensure the rail trail succeeds (should it proceed) in regard to ongoing maintenance and promotion. Numerous other ‘Friends of’ groups on other rail trails volunteer to undertake a wide range of routine maintenance tasks – saving the trail manager time and expense.



The Colinton Tunnel is one of the unique features of this disused railway line and will be a major attraction to users if the trail is developed.


-  **Attracting new visitors who spend money.** A trail such as the proposed Monaro Rail Trail will provide a number of opportunities. A trail will bring additional tourists and assist in keeping them longer in the area. A trail will create opportunities to build on existing industries and enterprises of the area. Australians are increasingly looking for passive, non-organised recreation opportunities, often in natural or near-natural settings. Demand for this type of opportunity will only increase as the population ages. While walking remains the most popular of these activities (and is likely to remain so as the population ages), off-road cycling shows a growing and often unmet demand within the trails market. The advent of e-bikes will only accelerate the popularity of cycling on




trails. The proposed Monaro Rail Trail would provide experiences for a range of user groups in a series of markets that have been consistent over time – walking, bushwalking and cycling – or growing significantly – off road cycle touring. The rail trail would provide for both visitors and local people who participate in a range of activities. A number of high-profile trails in Australia and New Zealand provide examples of user numbers that can be achieved on tracks and trails (a product within nature-based tourism). Users are attracted to trails that are both ‘known’ or advertised in some way and offer a range of facilities such as signage and interpretation, parking, toilets and water.

-  **Promoting the existing railway museums.** Of particular interest to many future rail trail users would be the outstanding collection of intact railway infrastructure (and museums) at Michelago, Cooma and at Bombala. Although the tourist trains are no longer operating (and perhaps may never operate again) the efforts of local volunteers to preserve, maintain and promote these station precincts (complete with station buildings, sheds, multiple tracks, signals, switches and turntables) is highly commendable. Should a rail trail be developed, these museum precincts will be of great interest to visitors to these towns.



The Cooma Monaro Railway group ran restored tourist trains between Cooma and Chakola siding (pictured above). Since ceasing operations, the area has become unkempt. Upgrading this building and the surrounding area and building on the interpretation that already exists within the building will provide an enhanced level of amenity for future trail users.

-  **Providing a momentum for station project upgrades.** Development of a rail trail will provide a stimulus for continued upgrading of railway station buildings and their adaptive re-use. For example, the Michelago Railway Station building has been refurbished/re-painted on the inside but is in need of a paint job of its exterior (according to local sources). Construction funds for the rail trail (should it proceed) may include provision for upgrading the station grounds. The opportunity to run commercial enterprises (such as a bike hire business or a café) from within an existing station building could supplement the income for the relevant organisations that run these buildings and station grounds.

-  **Revenue from sale of steel tracks.** The recent experience from the Tumbarumba Rosewood Rail Trail (currently being constructed) is that, following the passing of the Bill in the NSW Parliament to close the railway line and the subsequent transfer of the corridor to the local government, ownership of the assets within the closed railway corridor passed to the local government. In the case of the Tumbarumba Rosewood Rail Trail the removal and sale of the steel railway tracks resulted in a financial gain for the Snowy Valleys Council and therefore the rail trail project.
-  **Business development.** There is a range of business opportunities for private sector investors arising from the potential development of a rail trail. Providing accommodation, food and beverages, supported and guided tours and equipment, are some of the businesses that have arisen along other trails. Such services add significantly to the user's enjoyment if done properly. A 2015 user survey of the Otago Central Rail Trail reported that ratings for package operators have consistently improved over time and were rated 9.5 out of a possible 10 in 2015. There is no doubt that this contributed to visitors rating their overall rail trail experience at 9.0 out of a possible 10. The Otago Central Rail Trail website (see <http://www.otagocentralrailtrail.co.nz/tour-operators/>) currently lists 15 'tour planners' who can provide all your transport, bike hire and accommodation booking needs.
-  **Non-monetary benefits.** Trails can improve community connectivity and provide increasing recreational options for local people thus contributing to both physical and mental health of communities through which they pass.






6.2 Consideration of Other Potential Uses of the Corridor









As well the Feasibility Study that is currently examining whether a train service can be re-established between Canberra and Bombala, and onwards to Eden, there are other groups with aspirations to utilise the disused railway corridor for tourist train or pedal cart operations.

These are:

1. Cooma Monaro Railway Inc (which formerly ran tourist trains from Cooma to Chakola Siding, and which now maintains a museum at Cooma Railway Station);
2. Friends of Bombala Railway Inc. (which has aspirations of running pedal carts between Bombala Station and Bukalong Siding and which currently maintains the Bombala Railway Station precinct); and
3. Cooma to Rock Flat Railway Group (which has aspirations of running trains between Cooma and Rock Flat).

When evaluating the aspirations of heritage rail organisations, it is assumed that the relevant authorities would take the following factors into consideration when determining the viability of alternative uses and bona fides of the applicant:

-  *Is there a recently completed Feasibility Study, Strategic Plan or Business Plan for the proposed use?*
-  *Does the proponent have a Licence to Operate?*
-  *Does the proponent have a Management Plan for the Station (or railway corridor)?*
-  *Does the proponent have a current SWMS (Safe Work Method Statement)?*
-  *Does the proponent have a current Safety Plan (assessing the risks) for the corridor?*

-  *What are the membership levels, skills sets and available resources?*
-  *Does the proponent have a clear understanding of the financial resources required to run and maintain an operating heritage railway, based clearly on examination of other such operations?*
-  *What financial resources does the proponent have for repairs to (or reinstatement of) bridges, track and sleepers, culverts and other drainage devices, earthworks and signalling etc?*
-  *What financial resources does the proponent have for ongoing running and maintenance of rolling stock and track?*
-  *Does the proponent have sufficient skills and accreditation?*
-  *Is the current (or proposed) operation licensed by the National Rail Safety Regulator? If so, what conditions for use of the line have been imposed?*
-  *Does the proponent have a lease, licence, permit or Local Government approval to occupy station sites and/or the railway corridor?*
-  *Does the proponent have any other relevant plans such as landscaping plans for station ground improvements?*

It is assumed the relevant authorities (especially the Office of the National Rail Safety Regulator) will consider all these matters when determining whether to support any rail operation in its plans to make use of any segment of this corridor.

Heritage railway operations are not identified in the *The Snowy Monaro Regional Economic Development Strategy 2018 -2022* as a potential growth activity – unlike a rail trail which is identified as an early stage action.

Regardless of whether a trail is developed or not, or whether a train service is returned on some or all of the corridor, the railway corridor will likely always remain in Government ownership.

6.3 Trail Experience Development

The *Monaro Rail Trail Pre-feasibility Assessment (TRC)* stated that, “*whilst villages/towns are well situated for overnight accommodation, the distance between them is too long for the target market without good stopping places and interesting experiences during the day. Cycle tourists and recreational riders are not primarily focused on cycling but on the broader experience and, as such, there needs to be places to stop, shelter and enjoy a break and refreshments or similar every 20-25kilometres as a minimum (as per other successful rail trail experiences show in appendix). For the Monaro Rail Trail there will need to be engagement with landholders and/or travelling support services (such as commercial bike operators supplying their client and popup coffee carts for example) to enable this to occur. The trail would also benefit from things to do (such as farm visits/stays, interpretation history of Monaro pastoral properties/wool industry, train station setup as museums, art exhibits or mural installations etc).*”

Recognising that future trail users will require regular breaks during their use of the trail, the costs tables make allowance for the upgrading of existing siding buildings, the installation of additional mid-section shelters and toilets, the installation of interpretation and sculptures at regular intervals and the installation of trailside furniture (at scenic viewpoints).

The spectacular (and numerous) bridges will be one of the key reasons why this rail trail will attract significant usage. The Colinton Tunnel is another. Re-building the majority of the bridges for trail use is considered essential as cycling and walking across these historic structures is what people will come to experience. Opportunities to get underneath and/or alongside these structures to observe the work that went into their construction will be a big selling point.

As has happened with other significant rail trail projects elsewhere in the world (and the Otago Central Rail Trail is a prime example), the presence of large numbers of trail users has spawned the rejuvenation and adaptive-reuse of dilapidated buildings, the provision of new accommodation options (such as BnB's and chalets) and refurbishment of older accommodations, the offering of side-trips (such as local tours to abandoned gold mines), the re-opening of closed businesses (such as taverns) and the start-up of over 15 businesses providing touring and logistical support to trail users.

Savvy local people in the Monaro region will see opportunities to provide services to Monaro Rail Trail users. Already several adjoining landowners who attended the Open Houses are thinking of ways in which they can interact with trail users. For example, an adjoining landowner in the Jincumbilly/Ando locality is looking into setting up accommodation units to service trail users. An adjoining landowner in the Bredbo locality is keen to sell locally produced foodstuffs to passers-by.



The installation of sculptures along the Barossa Rail Trail in South Australia adds considerably to the experience enjoyed by users of this rail trail. A similar approach could be undertaken for the proposed Monaro Rail Trail and the cost tables make an allowance for some sort of artistic installation at various intervals along the proposed trail.

As mentioned elsewhere in this report, the operators of the railway museums and collections at Michelago, Cooma and Bombala could benefit from trail users and therefore it is recommended they take steps to promote their operations to take advantage of the influx of visitors using the trail (should it proceed).

The landscape and scenery of the region is without question one of the greatest features of the proposed rail trail, and this alone will attract thousands of rail trail visitors. The addition and promotion of other experiences, and a carefully targeted marketing campaign, will help ensure the proposed rail trail continues to build in popularity and that users return.

As stated in the Pre-feasibility Assessment (TRC), the vision and initiative of the community and businesses is critical to underpin the tourism experience and the initial and ongoing success of the trail.

SECTION 7 - VISITOR MARKET AND NEEDS ANALYSIS


7.1 Introduction




A trail such as the proposed Monaro Rail Trail will provide a number of opportunities generally associated with recreation trails. These opportunities will be provided in general whether the trail runs from Michelago to Bombala, or from Queanbeyan to Bombala. It is reasonable to argue that the magnitude of the opportunities will be different if the longer rail trail is developed. A longer rail trail may also provide additional opportunities, particularly in the visitor market.

A trail will bring additional tourists and assist in keeping them longer in the area. A trail will create opportunities to build on existing industries and enterprises of the area. Australians are increasingly looking for passive, non-organised recreation opportunities, often in natural or near-natural settings. Demand for this type of opportunity will only increase as the population ages. While walking remains the most popular of these activities (and is likely to remain so as the population ages), off-road cycling shows a growing and often unmet demand within the trails market. The proposed Monaro Rail Trail would provide experiences for a range of user groups in a series of markets that have been consistent over time – walking and bushwalking and cycling – or growing significantly – off road cycle touring. The trail would provide for both visitors and local people who participate in a range of activities. A number of high-profile trails in Australia and New Zealand provide examples of user numbers that can be achieved on tracks and trails (a product within nature-based tourism). Users are attracted to developed trails that are both ‘known’ or advertised in some way and offer a range of facilities such as signage and interpretation, parking, toilets and water.

7.2 General Visitor Trends

Regional destinations offer key experiences for what Australians are seeking from their holidays. While Australian travellers do not have one typical destination in mind when they think about regional travel, there are some experiences common to everybody’s idea of what is on offer in regional Australia.

-  The millennials age group seeks authentic and genuine travel experiences, together with a variety of active and passive ways to enjoy them. For older millennials, in the 25-34 age group, travel is about rejuvenation and search for self. Through travel, this group seeks to recover from work and is a way of getting away from responsibilities of everyday life. They feel the need for regular breaks to sustain and keep themselves going and seek out relaxing experiences that they can’t have at home. For regional destinations to attract millennials, they need to offer something unique and have basic, yet sophisticated experiences. This could include nature-based experiences, as well as country food and wine. Short breaks in regional NSW currently offer millennials an opportunity to relax and reflect, often with friends. Importantly, in this context, rest and relaxation does not mean just passive experiences, but rather experiences that promote discovery, rejuvenation and an opportunity to forget about routine life, and these can include very active pursuits. (*Attracting millennials to Regional NSW Tourism Research Australia, 2017*)

-  At the opposite end of the age range, the over 55s is one of most powerful age groups in Australia in terms of financial capability and life expectancy is increasing. In a recent survey of Australians aged over 55 years, 96% of respondents took at least one leisure trip within Australia in the past 12 months, and the percentage of respondents who took two and three leisure trips was 26% and 23% respectively. This age group preferred domestic travel to international travel. According to the survey, the most important reasons for over 55s taking overnight leisure trips are spending time with family and friends, getting away from daily routine, having fun, spending time with partner and to relax mentally. (*Over 55s travel to NSW Destination NSW, May 2015*).
-  The fifties are the new demographic for travel brands – more people are choosing to travel earlier than retirement to enjoy the more active or immersive experiences that destinations have to offer. This is one of the key demographics for rail trails.
-  For families, domestic travel offers an opportunity to have a break from normal routine, to reconnect and open the lines of communication between adults and children without time pressures. Ease and convenience are the key drivers for domestic travel by families in Australia, and they are looking for destinations that are relaxed and easy with beautiful surroundings, preferably only a few hours' drive from home. (*NSW Family Travel Market Destination NSW, June 2015*). Destinations that offer relaxation, novelty, outdoor activities, arts and heritage sites are appealing to families. However, family travellers seek destinations for relaxation more than non-family travellers. Family travellers seek holidays offering experiences that are authentic, different to normal and which create positive memories. The future of family tourism lies in catering for the increasing diversity of the family market. It includes offering opportunities for relaxation as well as activities that help create happy memories that appeal to the different ages of travellers in diverse family group structures. (*Schänzel and Yeoman, 2015*). This market (particularly the 35-54 age group) is higher yield and is continuing to show positive growth.




7.3 General Visitor Numbers

Available figures for the Snowy Mountains Tourism Region for the last 8 years are shown in Table 3. Visitation has fluctuated in the 8-year period.

Table 3: Visitor numbers to the Snowy Mountains Region 2010 – 2018

Year ending	Domestic overnight visitors	Day trip visitors	International visitors
Dec 2010	695 000	507 000	20 000
Dec 2011	715 000	607 000	18 000
Dec 2012	690 000	454 000	18 000
Dec 2013	700 000	683 000	20 000
Dec 2014	722 000	561 000	17 000
Dec 2015	788 000	586 000	22 000
Dec 2016	800 000	685 000	16 000
Dec 2017	930 000	498 000	23 000
Dec 2018	1 003 000	603 000	23 000

Source: Destination NSW 2018

-  The number of domestic overnight visitors has increased in the last 8 years. The December 2018 figure represents a 7.8% increase over the corresponding period in 2017 and a 44.3% increase over the corresponding period in 2010.
-  The number of international visitors has jumped around since 2010 and the 2018 data represents the equal highest number in that period.
-  In the period ending December 2018, day trippers numbered 603,000. This represents a 21% increase over the corresponding period in 2017 and a 18.9% increase over the corresponding period in 2010. Again, these figures are quite volatile. The 2018 data represents the 4th highest number in that period. No data is available on the source of these day trippers.

There are a number of features of general visitor numbers to the region demonstrated in a number of studies in recent years:

-  The *Snowy Monaro Region Economic Development Strategy 2018-2022 supporting analysis* notes that overnight visitors to the region are spending in the order of \$521 million.
-  The *Lake Jindabyne Shared Trail Project Business Case (2018)* notes that tourism contributes 2,219 direct full-time employees and 1,440 indirect full-time employees to the region's economy.
-  The *Snowy Rivers Shire Council Strategic Tourism Development Plan (2016)* (which focussed on the previous Snowy Rivers Shire) included a visitor survey in its work and found that more than 50% of summer visitors to the Shire stayed 4 nights or more; within that number, 25% stayed between 5 and 7 nights. Existing summer visitors are used to staying for long periods in the region – a receptive market for undertaking a trip on the entire rail trail (which could take between 3 and 7 days).

- ✚ The same work identified that 62% of summer visitors came from NSW and 22.5% came from the ACT. 9.5% of visitors came from Victoria. The trend of winter visitors was slightly different with more from NSW (73%) and less from the ACT (12%) and Victoria (4%). Winter visitors also tended to long-term stays – 31.2% stayed between 5 and 7 nights while 22.5% stayed more than 7 nights.

7.4 Trail User Numbers

7.4.1 Visitors

Recreation trails provide an important piece of tourism infrastructure and provide experiences in the nature-based tourism market and particularly the adventure tourism market. Nature-based tourism is estimated to be growing at 10-30% per annum – a significant growth market to target (*Victorian Nature-based Tourism Strategy 2008-2012*).

Visitors most likely to participate in cycling or walking activities are ‘nature visitors’. According to Tourism Research Australia (TRA), the majority of nature visitors in Australia are domestic visitors rather than international visitors.

Research shows that nature-based activities are important for tourism in the region (*Destination Country and Outback NSW’s Destination Management Plan 2018-2020*). The number for trips that include nature-related experiences is growing in real numbers and as a percentage of total trips.

The Destination Management Plan reports that Australians have participated in a broad range of nature-based activities as part of their overnight travel over the last year (2017). This includes:

- ✚ An increase of 12% to 10.8 million visitors to national parks;
- ✚ More people undertaking bushwalking, which grew by 9% to 11.3 million; and
- ✚ Growth of 12% in water-based activities and sports, up to 3.4 million visitors.










There has also been an increase in the number of domestic overnight travellers who connect with local communities, in particular through attending festivals, events and fairs, which grew by 14% to around 3.4 million.

Not all nature visitors are interested in the types of activities undertaken on tracks and trails, however Tourism Research Australia estimates that 51% of domestic overnight nature visitors take part in bushwalking / rainforest walks, whilst 39% of domestic day visitors and 37% of international visitors enjoy this type of activity (*TRA Snapshots 2009*).

A number of high-profile trails in Australia and New Zealand provide examples of user numbers that can be achieved on tracks and trails (a product within nature-based tourism). Users are attracted to developed trails that are both ‘known’ or advertised in some way and offer a range of facilities such as signage and interpretation, parking, toilets and water.

- ✚ Use of the Bibbulmun Track (WA’s long-distance walking track linking Perth and Albany) increased from 10,000 in 1998 to 35,000 in 1999-2000 to 137,500 in 2003 (*Colmar Brunton 2004*) to over 167,000 in 2008 (*Colmar Brunton 2009*). In 2015, it was used by over 300,000 people (*Hughes et al 2015*). 79% of 2007/08 users came to the track specifically to use the track. The Bibbulmun Track offers a wide range of experiences,

from a gentle stroll to enjoy the peace and beauty of the natural environment, to an epic eight-week adventure. The trail offers a diversity of accommodation – users can enjoy a wilderness experience by camping out, they can join a guided group, a tour, or they can do it in comfort by staying in the towns along the Track and enjoying day walks in the area (*Bibbulmun Track Foundation website*).

-  The Munda Biddi Trail is WA’s off-road cycle touring equivalent of the Bibbulmun Track. Running from Perth to Albany (a distance of 1,088 km), it attracts 21,000 users per year (*Munda Biddi Website*).
-  The Great Ocean Walk in Victoria attracts 100,000 visitors per year (*pers com Parks Victoria*).
-  The Wilsons Promontory Walk (Victoria) attracts some 60,000 visitors/year (*pers com Parks Victoria*).
-  The Murray to the Mountain Rail Trail (Victoria) attracts almost 60,000 annual visitor days in 2010 (*SGS Economics and Planning 2011*)
-  The Otago Central Rail Trail (NZ) offers a 3-day cycle or 5 day walk experience covering 150 kms. In 2011, over 14,000 users traverse the entire length each year, with the most popular section attracting over 20,000 users. In 2015, almost 15,000 users rode the trail from end to end. Cyclists undertaking the complete journey often do so in 3 days, while walkers take 5 days. A number of tour operators offer a “guided” service for cyclists in particular, allowing users to spend all day riding between accommodation options carrying only what they need for a day and their gear is transported from accommodation place to accommodation place.
-  In the first 6 months of 2019, 17,000 people used the most popular section of the Brisbane Valley Rail Trail, Australia’s longest rail trail (*Gatton, Lockyer and Brisbane Valley Star 29/7/19*).
-  Data from Colac Otway Shire (Victoria) shows that the total usage on monitored sections of the Old Beechy Rail Trail for 2013 (excluding Beech Forest) was 23,368. This does not include data for the Colac section of the trail, as monitors were not installed at that location.
-  In the first quarter of 2014, the Great Victorian Rail Trail (a 134 km rail trail between Tallarook and Mansfield) had 27,500 users pass through trail counters. This figure is unlikely to represent total numbers of users as some users would have travelled past more than one counter, but it does represent significant trail usage.
-  Recent counts (2011-2013) for South Australia’s Riesling Trail (a 34 km rail trail in the Clare Valley) show 40,000 people passing through 4 trail counters each year.

7.4.2 Local Users

Tourism numbers are important. However, it is important not to overlook the contribution of local residents to the success of a trail. In 2001, the Mundaring Shire (in Western Australia) trail network was used by over 200,000 people (*Jessop and Bruce 2001*), having grown from a low base when the network was first fully opened. Only 10% of these users were locals (residents of Mundaring Shire) with many other users drawn from the Perth metropolitan area. The total annual visits (people generally use trails more than once a year) were a staggering 2.454 million







visits annually, with local residents accounting for 63% of these visits. Their expenditure on the trail was also significant. While the individual value was low (i.e. expenditure per person per visit), the cumulative economic impact was significant. Local trail users spent an average of \$1.44 per visit to the trails in the Shire. This injected a further \$2.23 million into the local economy annually. The same local trail users spent an additional \$2.62 per visit outside the Shire, adding a further \$4.05 million to the total State economic benefit.

Along the proposed route, Cooma's population is 6,683, Bombala's population is 1,383, Nimmitabel is home to 320 people, Bredbo has 352 residents and Michelago houses 562 people. Queanbeyan is home to 36,348 people.

7.5 Trail User Characteristics

7.5.1 Broad Trends

A number of broad trends are influencing the way people participate in outdoor recreation:

-  Increased demand for informal recreation (as opposed to formally organised sport);
-  Increased demand for access and contact with the natural environment associated with urban to rural residential shift;
-  Increased visitation to natural areas as an escape from modern lifestyles;
-  Increased awareness and concern for health, with obesity and stress on the rise;
-  Increased use of technology to support outdoor recreation (e.g. geocaching, Strava, EveryTrail, Trailforks); and
-  Increased computer-based leisure including the internet.

In general, the population are making increased 'lifestyle' choices that associate with greater access and contact with the natural environment. This includes aspects of urban to rural residential drift ('sea change' and 'tree change'), increased demand for open space (parks, recreation trails etc.) in urban developments, and increasing demands for recreational time in the outdoors (changing work patterns and day trips from home).

Two other trends have also driven higher outdoor recreation participation - increasing health and environmental awareness and increasing affluence and expectations of recreation.





People are becoming increasingly concerned about their health, with conditions such as obesity and stress on the rise. This, combined with society's growing environmental awareness, has facilitated a growth in visitation to natural areas. A term referred to as 'returning to nature', where people feel the desire to become reconnected to their natural environments from which they can escape their modern lifestyles.

As individuals become more affluent, the proportion of income spent on goods and leisure increases. As people spend more money on outdoor recreation and associated equipment, an increase in outdoor recreation activities, previously offered by commercial operators, has been observed. As such, a diversification for natural areas offering unique experiences and higher levels of infrastructure are often in demand.

7.5.2 What Do People Do on a Trail?

7.5.2.1 An Overall View

Unfortunately, the most recent Exercise, Recreation and Sport Survey was done in 2010 and has not been updated since that time (though Queensland undertook its own research in 2016). The 2010 study reports on the propensity of Australians to participate in trail-related activities at a general level (note that these figures show the number of people who have participated in the activity at least once in the last year):

-  34% of survey respondents across NSW participated in walking, making it the most popular form of activity. This percentage has been consistent since 2001, and walking has been the most popular exercise activity since 2001.
-  10.6% of survey respondents across NSW participated in cycling, making it the fourth most popular form of activity. Again, cycling has been amongst the top 5 activities since the ERASS began in 2001.
-  4.8% of survey respondents across NSW participated in bushwalking, making it the seventh most popular form of activity. Bushwalking’s percentage share of exercise has moved up and down since 2001, but it consistently appears in the Top 10 activities.
-  An estimated 6.7 million persons aged 15 years and over participated at least three times per week in non-organised physical activity (which includes walking, cycling and bushwalking), a regular participation rate of 38.5%.

A number of survey-based studies are available which together give a consistent indication of participation levels relevant to trails-related outdoor recreation activities. These studies come from South East Queensland (1998, 2001 and 2007), South Australia (Adelaide and Adelaide Hills, and *Market Equity 2004*), and the ACT. Table 4 provides a summary of the relevant participation rates.

Table 4: Participation Rates in Outdoor Recreation Activities

Study	Walking	Cycling	Horse riding
SE Qld (1998)	60%	25%	7%
SE Qld (2001)	50%	26%	7%
SE Qld (2007)	35%	29%	7%
South Australia	59%	26%	*
SA – Market Equity	69%	29%	*
ACT	73%	58%	*

* no horse riding trails were considered in these surveys

The figures for participation show the percentage of the population for the town or region who had participated at least once in walking, cycling or horse riding in the previous 12 months. All studies used large samples. (A number of other outdoor-related activities such as bird watching, canoeing and scuba diving were included as possible responses – this is why the figures do not add up to 100%). The ACT study included a large number of school-aged children, which may explain the higher participation rates, particularly for cycling. The very

extensive Canberra bike path network may also have contributed to the high participation in cycling. The point of most significance in these figures is the relative proportion or level of participation for each of the three activities.

7.5.2.2 Walking



Clearly walking is the most popular trail related activity and is in fact one of the most popular outdoor activities amongst all Australians. It is likely to remain so as the population ages. Walking continues to be the most popular activity for people aged over 34 (*ERASS 2010*). Bushwalking continues to be a relatively popular activity.

7.5.2.3 Off-Road Cycling

Unfortunately, none of the surveys distinguish between cycling generally and off-road cycling (both off-road cycle touring and traditional mountain biking). Off-road cycle touring and mountain biking is a rapidly growing recreational pursuit around Australia, and there is growing usage of non-urban areas for this activity. Cycle tourism is a growing market within the Australian tourism sector, particularly within the nature-based tourism segment. Available research demonstrates that cycle tourism has the potential to make an active contribution towards the economic revitalisation of regional Australia as well as improve quality of life for its residents (*Victoria's Cycle Tourism Action Plan 2011-2015*). Cycle tourism is a growing market. NSW received 520,000 cycling visitors in 2007 who stayed an average of 5.1 nights (*New Zealand Cycleway Market Research 2009*). In 2010, Australia recorded approximately 258,000 international overnight visitors who participated in cycling (*Victoria's Cycle Tourism Action Plan 2011-2015*). Domestic overnight visitors who participate in cycling on their trip stay longer and do more while on holiday when compared with other tourists, making them a stronger source of income for regional communities. The *Pre-Feasibility Assessment for the Monaro Rail Trail* (2018) noted that some 6% of international visitors and 2% of domestic overnight visitors include a cycling activity on their trip.

Mountain biking underwent a tremendous increase through the 1990's. It has been one of the 'boom' recreational pastimes of the last two decades. Cross-country mountain biking (the oldest type of mountain biking) remains the most popular type of mountain biking activity. It can be undertaken in a variety of places and terrains, from management trails to shared trails to purpose-built single track.

The *Kosciuszko National Park Cycling Strategy (draft version 2016)* identified that mountain bike riders can be broadly divided into core and non-core riders:

-  Core mountain bikers tend to be more experienced riders who may differentiate into one or more different genres. They tend to have high levels of mountain bike participation, are high spenders on gear and equipment, are willing to travel to mountain biking destinations and have a high likelihood of participating in competitive events.
-  Non-core mountain bikers include novices, families seeking safe enjoyable places to ride away from cars, school groups (often guided by tour operators), off-road bike tourers (from rail trails to trails in steeper and more difficult terrain) and people seeking a different outdoor experience or adventure (such as undertaking a guided experience or hiring a bike while on holiday).

The Mawson Trail in South Australia was primarily designed for off-road cycle touring, and the 1,000km Munda Biddi Trail in WA is designed exclusively for off-road cycle touring. These projects indicate a growing demand for cycle trails, as does the popularity of rail trails in Victoria. Over the last eight years, much of the trail planning and building activity across Australia has focussed on mountain bike trails, either within reserves or in specifically prepared mountain bike parks (such as the Forrest Mountain Bike Trails in Victoria's Otway Region). The SEQ Regional Trails Strategy (*Qld Outdoor Recreation Federation 2007*) also noted a strong demand for cycling in younger age groups (less than 30 years old). Work by Market Equity (2004) for the South Australian Office of Recreation and Sport adds to the body of evidence on the popularity of cycling, particularly on rail trails. Market Equity's survey of five trails in South Australia (interviewing 933 trail users) included the Riesling Trail (a rail trail); the percentage of trail users that were cyclists was quite high at 65% (compared to an average of 29% of cyclists across the five trails).

Many of the cycle touring trips would be confined to bitumen (quiet back country roads etc.) but a significant portion may be interested in an off-road cycling experience. The *New Zealand Cycleway Market Research (2009)* found that, in general, international cycle tourists want easy multi-day trips with good supporting services or events. The holidays can also be location-based and utilise nearby trail networks. Domestic cycle tourists and recreational riders are not primarily focused on cycling but on the broader experience. This group is likely to be older or consist of families rather than single visitors or couples. Both markets are looking for easy access to safe and traffic-free trails. Trail gradient is a critical factor in successfully designing a trail for a specific market or type of rider. For a large portion of the location-based cycling and cycling holiday market, average trail gradients of 2-3 degrees are required (this explains the popularity of rail trails for this market). The proposed rail trail provides gradients of this small magnitude and thus has the potential to be a successful trail product in this market.

7.5.2.4 Horse Riding





Horse riding is an activity by a relatively small number of participants (around 7% of outdoor recreation activities). Horse riding demand can also be highly localised – certain localities attract residents who are horse riders. A rail trail could offer this opportunity (as it does in some other locations – some 25% of rail trails in Australia allow horse riding).

In summary, the proposed Monaro Rail Trail would provide experiences for a range of user groups in a series of markets that have been consistent over time – walking and bushwalking and cycling – or growing significantly – off road cycle touring. The trail would provide for both visitors and local people who participate in a range of activities.

7.5.3 How Long Do People Spend on a Trail?

If fully developed the proposed Monaro Rail Trail would be a rail trail of 213 kilometres (Queanbeyan to Bombala) which would make it the longest rail trail in Australia. Simply being the longest trail may attract some particular usage.

Long rail trails are relatively rare in Australia and New Zealand:

-  The Brisbane Valley Rail Trail is the longest at 161 kilometres.
-  New Zealand's Otago Central Rail Trail, which is very popular with both New Zealanders and Australians, is around 150 kilometres long.
-  The Great Victorian Rail Trail in Victoria's north east is 134 kilometres long.
-  The well-known Murray to the Mountains Trail, also in north east Victoria, is 116 kilometres long.

A few rail trails in Victoria, Queensland and Western Australia are in the 80-100 kilometres range, while most rail trails across Australia are less than 50 kilometres and can be cycled (at least) in a day or less.

Long trails are more common in bushwalking, where several bushwalks in Australia and New Zealand take more than one day to complete (i.e. at least one overnight stay is required to traverse from end to end).

The nature of the long walk trail (as actively marketed to bushwalkers) has changed over the years. Such trails have always been aspirational but often primarily for the serious dedicated bushwalker – the Appalachian Trail and the Pacific Crest Trail (on the east and west coast of America respectively) are two long walk trails that are well known to many users. Both trails extend for over 3,000 kilometres and require very dedicated users to walk from end to end. Of course, many users do not walk from end to end but do the trail in sections “ticking off” sections until they have “completed” the trail. In the 4 years from 2010 to 2013, some 2,600 users walked from one end of the Appalachian Trail to the other. Every year, some 3 million people use part of it. Both trails primarily offer a bushwalking experience though they do have constructed shelters (rather than relying on people camping out in tents) and often wander in and out of small towns and villages thus providing an economic boost to these small communities en route.

The Bibbulmun Track (in south-west Western Australia) is modelled on the Appalachian Trail and connects Perth to Albany – an 6-8 week bushwalk for keen walkers (a distance of 1,000 kilometres). Again, many users do sections. The most recent research shows over 300,000 users walk some section of the trail each year (growing from 10,000/year in its first year of operation in 1997 on a radically altered alignment) whilst some 300 users go from end to end each year (*Hughes et al 2015*). The Munda Biddi Trail parallels the Bibbulmun Track and has been developed for off-road mountain bike riding (i.e. cycle touring). It attracts 21,000 users per year (unfortunately there is no data on how many users go end to end compared to how many cycle sections of it).

Australia has a large number of wilderness long walks – different from those mentioned above in that users are very isolated. These trails are much shorter than the three mentioned above. Many of the Tasmanian walks (such as the Overland Track), the Larapinta Track in the Northern Territory, and the Great Ocean Walk (Victoria) are some of the better known Australian long walks of this nature. The Great Walks of Queensland programme has been another development along similar lines (though it has not been as successful as the Tasmanian walks). The Queensland Great Walks programme is designed to offer world class walking tracks with a variety of experiences from mid to long-distance as well as short walk sections that can be completed in less than one day.

The long New Zealand walks, such as the Routeburn Track and the Milford Track, have existed for a long time but have taken new steps in popularity using guided walks and “luxury” huts (limiting user numbers adds to the appeal).

The “pilgrimage style” walk has grown in popularity over the years – the Camino de Santiago (Pilgrim’s Way) in Spain is the best example. Closer to Australia, the Kokoda Track in Papua New Guinea is also marketed as a pilgrimage style walk. The Camino offers a rural countryside experience whereas the Kokoda Track offers a much different bushwalking experience. The distances also vary greatly.

In recent times, there has been a significant rise in the commercialisation of long walks – people using guided and assisted tours and staying in more “glamorous” accommodation (glamping). Rail trails across Australia and New Zealand have also begun to offer this option.

Many commercial operators now provide a range of services on these walks and rides. Commercial opportunities have played a major part in increasing the popularity of these long walks. This applies to many of the long walks listed above and a range of other long walks across Australia (the recently opened Three Capes Walk in Tasmania has been clearly geared towards a commercial market). The “ultimate” expression of the commercialisation of long walks has been the development of long trails on private land (in some case, these have used part of the public estate). The Scenic Rim Trail in Spicers Gap is a good example of this development offering guided walks, luxurious accommodation and provisions.

Event walks (of significant distances) have also developed in recent years. The Oxfam 100 hour walk which uses Mt Coot-tha and the adjoining D’Aguilar National Park in the Greater Brisbane is one good example. Training for such events also leads to a demand for long walk trails.

On a rail trail, many users can average 40-50 kilometres per day. Under this scenario, users would probably take 4-6 days to complete the trail if cycling.



Above: a variety of users are encountered on the Otago Central Rail Trail, including many from NSW and elsewhere in Australia.

7.6 How Much Do Trail Users Spend?

Successful trails are already attracting large numbers of visitors and they are spending reasonable amounts of money both in the local economies and in the broader economy. The following figures provide a snapshot of expenditures from a range of trails to demonstrate user expenditures.

- ✚ The Mundaring Trails Network, 1 hour from the Perth CBD, injected some **\$12.62 million** into the local economy and a **further \$15.21 million** into the State economy annually. Local residents spent \$4.06/visit to the network and visitors (primarily day users) spent \$23.71/visit. The key is that the total number of trips on the trails studied was a staggering 2.454 million visits annually (*Jessop and Bruce 2001*).

Users of South Australia's Riesling Trail (a 35 km rail trail in the Clare Valley) who come primarily to use the trail are estimated to spend **\$1.08 million/year** (\$215/person/visit with daily expenditure of around \$100). This does not count the other 50% of trail users who use the trail as a secondary purpose for their visit (*Market Equity 2004*).

The economic impacts of the Bibbulmun Track (WA's long-distance walking track) have been studied over two periods (in 2003 and 2007/08). In 2003, the track was shown to have generated **\$21 million** of expenditure **annually** by track

users, well in excess of its one-off construction costs of \$5 million (*Colmar Brunton 2004*). More recent figures show an increase in this amount (due to an increase in both users and how much time they spend on the track). The estimated expenditure in 2008 is around **\$39 million annually** (*Colmar Brunton 2009*). The 2007/08 study shows that the average day walker (some 70% of all users) is spending \$50-\$60/day, while those walking the track for 2-3 days are spending around \$200/visit. Those using the trail for 6 weeks or more, while small in number, are spending \$1,400/visit.

The Murray to the Mountains Rail Trail in North East Victoria is one of the better-known rail trails in Australia. Research work undertaken over Easter 2006 (*Beeton 2006*) found that average daily expenditure was **\$258/user/day**. The bulk of this expenditure was on food and beverage (57% of daily expenditure which equates to \$147/user/day). Beeton applied accepted economic multipliers to these figures and calculated that the direct contribution to the local economy per user per day was in excess of \$480. (Recent follow-up work by Beeton (2009) made similar findings).

Users of New Zealand's Otago Central Rail Trail are spending **\$NZ 177/day** with the average length of stay in the region of 3.8 days. There is a range of expenditures – users doing the whole trail spend \$NZ 166/day while those doing part of the trail spend \$NZ 247/day. The trail created 81 direct jobs and a total of 102 jobs. Accommodation derives 41-48% of the benefit, followed by food and consumables. The trail is contributing some \$3.55 million directly to New Zealand Gross Domestic Product (GDP) and \$5.2 million in total (*Otago Central Rail Trail User Survey 2014/2015*).

Users of New Zealand's Hauraki Rail Trail are spending around \$5 million/year using the trail. Visitors are spending an average of \$172 per trip, and 50 full time positions had been created because of the trail.
(<https://www.stuff.co.nz/travel/destinations/nz/94123407/hauraki-rail-trail-contributes-millions-to-local-economy>)



The Otago Central Rail Trail on the South Island of New Zealand is an outstanding success, stimulating the establishment of 15 - 20 tour operators that provide logistical support. The rail trail has also stimulated private developments including chalet accommodation at Wedderburn, developed by the owners of an adjoining farming property.

There is a range of business opportunities for private sector investors arising from the potential development of a rail trail. Providing accommodation, food and beverages, supported and guided tours, and equipment, are some of the businesses that have arisen along other trails.

It is important to understand how trail users spend their money. Trail users spend money before coming to a trail and in towns and villages along the way. The expenditure data shown below represents an amalgam of existing research data on visitor expenditure related to rail trail. There are a number of specifically rail and cycle trails-related research projects on user expenditures. These are:

-  An Economic Analysis of Rail Trails in Victoria, Australia (*Beeton 2003*);
-  Regional Communities and Cycling: The Case of The Murray To the Mountains Rail Trail, Victoria, Australia (*Beeton 2006*);
-  Cycling in Regional Communities: A Longitudinal Study of the Murray to the Mountains Rail Trail, Victoria, Australia (*Beeton 2009*);
-  Trails Research Project (South Australia) (*Market Equity 2004*);
-  Nga Haeranga – The New Zealand Cycle Trail Evaluation Report (*NZ Ministry of Business, Innovation and Employment 2013*); and
-  Otago Central Rail Trail User Survey 2010/11 (*Central Otago District Council 2011*).

Reviewing the expenditure data from these 6 studies allows an understanding of average expenditure patterns of trail users for overnight trail users. Table 5 shows average amount spent by trail users and the broad sectors in which they spend their money (average expenditure per sector is drawn from most of the studies listed above – not all provided detailed data. The data was collected at different times and noted in different currencies. The figures below represent averages converted to 2018 Australian dollars).

Table 5: Trail user expenditure by category for overnight visitors (rail and cycle trails)

(Overnight users include those staying 1 night or more in the region to use a specific trail)

Sector	Average expenditure/day
Accommodation	\$52.99
Food and beverage	\$82.10
Transport	\$23.37
Retail	\$34.38
Other (including cycle maintenance)	\$20.19
TOTAL	\$213.03

Accommodation expenses range from \$37/day to \$145/day (in 2018 dollars). Data on trail expenditure from the Otago Central Rail Trail (2011) shows that total expenditure was just over NZ\$580 per person per trip covering people doing both part of the trail and the whole trail), with the largest component of expenditure for package expenses (including accommodation). Separate information on accommodation was provided by only a few users who spent an

average of NZ\$60/day. A New Zealand study found that users spent an average of NZ\$43/person/night across four trails on off-trail accommodation options only (*NZ Ministry of Business, Innovation and Employment 2013*).

The most recent research data from the Murray to the Mountains Rail Trail (*Beeton 2009*) shows 45% of users spent between \$51 and \$150/night on accommodation. It is worth noting that almost half of the trail users of the Murray to the Mountains Rail Trail listed their employment status as professional (e.g. doctors, lawyers, managers); trail users come from across the economic spectrum but there are many who are potentially high yield visitors.

Table 6 shows average amount spent by trail users on day trips and the broad sectors in which they spend their money. The research is drawn from the above 6 studies as well as:

-  Use and Users of the Appalachian Trail: A Source Book (*Manning et al 2000*);
-  Bibbulmun Track User Research Report (*Colmar Brunton 2009*); and
-  Bibbulmun Track User Survey Report 2014-15 (*Hughes et al 2015*).

The data was collected at different times and noted in different currencies. Average expenditure per sector is drawn from most of the studies listed above – not all provided detailed data. The figures below represent averages converted to 2018 Australian dollars.

Table 6: Trail user expenditure by category for day-trippers (day tripper expenditure was only available for some of the studies)

Sector	Average expenditure/day
Accommodation	\$0
Food and beverage	\$56.48
Transport	\$27.41
Retail	\$38.76
Other (including cycle maintenance)	\$25.22
TOTAL	\$147.87

7.7 What Types of Businesses Serve Rail Trail Users?

The *Snowy Monaro Regional Economic Development Strategy 2018 -2022* identifies that the leading employment sector in the region is accommodation and food services which employs some 13.6% of the workforce. A rail trail offers the opportunity for existing businesses to expand and new businesses in this sector (and other sectors) to develop, employing more people in the region. Identifying specific business opportunities along a trail that may take years to develop is not a simple task. Some success stories from other trails are worth considering.

7.7.1 Equipment Hire

While many visitors will bring bikes, some will not and a business opportunity presents itself to address this market. A number of cycle hire, cycle repair and guided cycle tour businesses are

accredited businesses under the Munda Bidli Trail Foundation's *Cycle Friendly Business* programme. These businesses offer a range of services along the length of the trail and pay an annual subscription fee to remain in the accredited programme.

7.7.2 Supported Tour Opportunities

Cycle tourism is a growing market. Domestic overnight visitors who participate in cycling on their trip stay longer and do more while on holiday when compared with other tourists, making them a stronger source of income for regional communities. Many of the cycle touring trips would be confined to bitumen (quiet back country roads etc.) but a significant portion may be interested in an off-road cycling experience. International visitors participating in cycling spend \$NZ3,800/person/visit while in New Zealand compared with the average of \$NZ2,500/person/visit for all other categories of international visitor. 22% of cycle tourists spend more than \$NZ5,000/person/visit (*Nga Haeranga – The New Zealand Cycle Trail Evaluation Report 2013*).

Supported tour opportunities are offered on Otago Central Rail Trail where some 10% of visitors take advantage of this service. A recent survey by the Otago Central Rail Trail Trust showed that total expenditure was \$NZ472.61 per person per trip along the rail trail. The largest component of expenditure is on package expenses (as it was in 2008/2009 when a previous survey was carried out). 'Off the Rails' is one such bicycle tour company that offers premium, eco-friendly and fully supported bike tours. The company offers various tours including accommodation, bike hire and guided sightseeing activities. All tours include transfers, care of all luggage during the tour and meals, providing a fully inclusive cycling experience. A key to its success is its ease of planning/organising for visitors – once the tour is booked in they do not have to think about anything else. (*SGS Economics and Planning and Quantum 2012*)

Such services are not confined to cycling tours. These services are also offered on the Bibbulmun Track. The Bibbulmun Walking Breaks (run by the Bibbulmun Track Foundation) provide packages for those who enjoy walking but do not want to carry a heavy pack or camp overnight. In 2002, the Walking Breaks programme won a national award for innovation in travel in the Jaguar Awards for Excellence. The Foundation also organises "best of the Bibbulmun 8-day tours". Both of these tours are carefully compiled to combine a variety of day walks with off-Track accommodation. A bus service transports users to the Track each day and returns them to accommodation in rural towns and villages at the end of the day. On the walks, users carry only a small daypack carrying food and other items.

A number of private providers offer similar supported activities on a number of trails – both walking and cycling. Tour de Vines – a cycling company – offers various cycling tours on Australian rail trails (as well as other cycle touring opportunities in Australia and overseas) (see <http://tourdevines.com.au/cycling-tours/cycling-tours-australia>). Out There Cycling offers supported cycling packages on the Brisbane Valley Rail Trail. The BVRT 3 Day cycle tour allows the rider enough time to explore the local towns and to enjoy the countryside at a relaxed pace. The tour can be experienced in a tent at selected camping areas or in a Hotel/Motel along the way. Users can choose to carry their own gear on the bikes or chose to have the gear transferred to the next stop. This company also offers a bus shuttle service encompassing both the Brisbane Valley Rail Trail and the Kilkivan Kingaroy Rail Trail (see <http://www.outtherecycling.com.au>).

Qualitative research done by SGS Economics and Planning and Quantum (2012) (focusing on Victoria’s north east) indicates respondents wanting activities and experiences that are easy to organise – the ‘facilitated’ experience, which would complement the existing scenic and safe trails through iconic rural villages. Facilitated itineraries would seek to emulate the best facilitated road cycling experiences in Europe, including the provision of regional interpretation, food and wine. The report noted that the North East’s Rail Trail is a key asset for the region, providing infrastructure from which a cycling experience could be leveraged.

The *Destination Country and Outback NSW’s Destination Management Plan 2018* notes a global trend that tourism activities such as tours are finally coming into their own. However, the focus is on small-scale, immersive and locally curated activities. This is particularly important in relation to Indigenous and nature-based tourism.

The length of the proposed Monaro Rail Trail (with or without an extension to Queanbeyan) would warrant the development of businesses offering supported tours. Alternatively, the rail trail (or sections of it) could be packaged with other walk and mountain bike trails and other outdoor recreation experiences in the region to provide opportunities for supported tours.

7.7.3 Guided Walking/Cycle Touring

This facility provides an even greater level of support for trail users; all “traversing” is done with the accompaniment of a knowledgeable guide (as well as the provision of all necessary equipment).

This type of service is offered on the Great Ocean Walk (e.g. Bothfeet Walking Lodge and Tours).

Internationally renowned adventure company World Expeditions offer a 7-day guided and supported hike along the Bibbulmun Track. One of the key features of these packages is that users simply pay just one flat fee for their entire holiday.



Several accommodation establishments are clearly benefiting for locating close to the Riesling Trail, resulting in economic benefits to the businesses and a bigger range of accommodation options cyclists and walkers using the trail.

7.7.4 Off-trail Accommodation

There is some opportunity to provide users with off-trail accommodation of varying qualities (adding to the existing stock of options) as the trail passes private property. Riesling Trail Cottages and Riesling Trail Bush Cottages provide self-contained accommodation adjacent to South Australia’s famous Riesling Trail through the Clare Valley. When these were first constructed, the owner was often asked “How close are your cottages to the wineries”; over time, the more common enquiry became “how close are the cottages to the rail trail”.

7.7.5 Food and Beverages

As noted above, food and beverages are one of the key business sectors that benefit from trail user’s expenditure. Available research does not indicate the types of food and beverages trail users consume; anecdotal evidence would suggest that most bike riders drink coffee – a high

profit item. But the research cited above does indicate the levels of expenditure on this type of item. Some of the best evidence is anecdotal. For example, one cafe on New Zealand's Hauraki Rail Trail was told to expect 35,000 patrons in the first year but actually got about 120,000 patrons through the door. The cafe had to increase staff from two to a summer staffing of 15 (<https://www.stuff.co.nz/travel/destinations/nz/94123407/hauraki-rail-trail-contributes-millions-to-local-economy>)

7.7.6 Supporting Existing Businesses

A trail increases the opportunities offered to existing businesses that currently provide relevant services to provide such services on a more regular basis. These types of examples are critical economic opportunities to diversify and solidify the sub-region's economic base. In New Zealand across four recreation trails subject to detailed research (*New Zealand Ministry of Business, Innovation and Employment 2013*), 1 in 5 businesses surveyed reported that they had either expanded their services (e.g. added capacity) or added new services since the trail opened in their region. These ranged from provision of cycle tours to cellar door tasting sessions, but were commonly in the provision of accommodation, transport or shuttles, or cycle hire. There was anecdotal evidence that trails have been beneficial for existing businesses either by absorption of existing excess capacity or by spreading the risk through the diversification of product.

On the Hauraki Rail Trail in New Zealand, one in seven businesses along the trail have adjusted their offerings to meet the needs of cycle trail users

<https://www.stuff.co.nz/travel/destinations/nz/94123407/hauraki-rail-trail-contributes-millions-to-local-economy>).

7.8 Conclusion

Australians are increasingly looking for passive, non-organised recreation opportunities, often in natural or near-natural settings. Demand for this type of opportunity will only increase as the population ages. While walking remains the most popular of these activities (and is likely to remain so as the population ages), off-road cycling shows a growing and often unmet demand within the trails market.

The Monaro Rail Trail would provide experiences for a range of user groups in a series of markets that have been consistent over time – walking and bushwalking and cycling – or growing significantly – off road cycle touring. The trail would provide for both visitors and local people who participate in a range of activities. The potential expenditures may be quite significant based on trail user expenditures elsewhere.

SECTION 8 – GENERAL OBSERVATIONS AND CONCLUSIONS

8.1 General Observations

On the basis of the corridor assessments undertaken and having given due consideration to the issues and opportunities, and with the comments received during consultation with the community, some observations and conclusions can be made:

- ✚ The corridor between Queanbeyan and Bombala contains one of the best collections of railway infrastructure and remnants of any railway that is the subject of a rail trail proposal in NSW. The corridor has over 90 bridges (of varying lengths) with several outstanding examples – one being 390 metres long. The corridor also features a number of railway stations (including Michelago, Cooma, Nimmitabel and Bombala) and several remaining siding buildings. Although there is only one tunnel, this is reasonably unique and at 161 metres long presents a wonderful reminder of the hard work that went into building railways. It will be a major feature of the trail should it proceed. The corridor also features signals and switches, distance signs and other railway paraphernalia. There are also turntables at some stations (Michelago, Cooma and Bombala). The short-lived meat works building at MacLaughlin Station is another unique aspect of this disused railway corridor – and well worthy of being interpreted (and made safe). In common with all other railway corridors, this disused corridor also features innumerable cuttings and embankments – all of which add considerably to what future rail trail users will come to admire and enjoy.



The scenery along the disused railway between Queanbeyan and Bombala is amongst the most spectacular in Australia and is likely to attract trail users from all over Australia.

- ✚ The scenery in the Monaro region is simply spectacular. People have said a rail trail in the Monaro region will rival the Otago Central Rail Trail (on the South Island of New Zealand). An inevitable comparison are the views of snowcapped mountains, wide treeless plains, sheep grazing in paddocks, pretty and interesting small villages and towns and the fact that the former railway corridor dissects paddocks and properties. The communities and the adjoining farmers alongside the Otago Central Rail Trail now regard that trail as an outstanding success, with little or no resultant problems. Many of the adjoining farmers, as well as numerous businesses in the towns through which that

trail passes, obtain financial gain servicing rail trail users. It is expected that a similar result will occur should the Monaro Rail Trail be developed.

- ✚ The regular spacing – and almost ideal distances – between towns and villages will provide for easy cycling (and walking) of the proposed Monaro Rail Trail over multiple days (similar to the Otago Central Rail Trail). The availability of food, drink, accommodation and other services in these small towns and villages, and the comparatively short cycling distances, would enable trail users to easily cycle between each town in the course of a day. More energetic and capable cyclists could ride more than one segment in a day. The only sector that most recreational cyclists may not achieve in a day is that between Nimmitabel and Bombala (at 61km). However, the development of a trailhead (parking area) at the Jincumbilly siding (or nearby accommodation) would facilitate the division of that sector into two easy day rides (Nimmitabel to Jincumbilly and Jincumbilly to Bombala).
- ✚ The corridor lends itself to being developed as a rail trail either in sections, or in its entirety. There are no sections that could be described as boring or not warranting development. It is evident, however, that the biggest benefit would come from development of the entire 213km rail trail – as that multi-day experience is most likely to attract visitors for a longer period (long weekends for example). In terms of staging, it would make sense to commence development of the proposed trail from the northern end at that is closest to the main markets (i.e. Canberra and Sydney).



Much of the disused railway corridor would need new fencing. Some parts have fencing one side; much of the corridor has no fencing. This would be a major cost component of developing the trail.

- ✚ Of the approximate 90 bridges, the most spectacular is the 390 metre bridge over the Numeralla River (just north of Chakola siding). However, it is the most dilapidated and will be the most expensive to refurbish for trail use. Given that there are many bridges, the cost to construct the rail trail will be comparatively high. However, many of the bridges are short in length and can be replaced at low cost. The fact that two of the bridges along the corridor are long (at 390m and 146m) is a very positive, and unique, feature. Long bridges and tunnels, high embankments and deep cuttings are amongst the most popular features of a rail trail and, together with the flat grades, the main reasons why rail trails are so popular.
- ✚ When compared with other sections of other proposed rail trails assessed in NSW and Queensland, each individual section of the proposed Monaro Rail Trail rates highly (in the assessments undertaken during the preparation of this Feasibility Study). For

example, the lowest rated section of the six sections along the proposed Monaro Rail Trail (Bombala to Jincumbilly at 60/100) compares very favourably with sections of the proposed Boyne Burnett Inland Rail Trail in Queensland (some as low as 24/100; 28/100; 34/100; and 35/100). This is mainly due to the presence of a town (with services) at both ends, wonderful scenery along the way and proximity to potential users/markets.



A typical scene along the corridor south of Cooma (north of Bukalong siding). The railway south of Cooma was developed without fencing and without ballast.

- It is very evident that, should it be proven feasible that a train could be re-established on the corridor between Queanbeyan and Bombala, a trail could not share the same corridor as that train service. It is assumed (in the absence of any other information about the proposal) that the train may utilise not just the same corridor as the disused railway line, but all of the bridges, the tunnel and all of the high embankments and deep cuttings. To have a trail alongside an operating railway in the same corridor would necessitate replicating all of those original bridges, replicating most of the embankments and probably many of the cuttings, and circumnavigating the tunnel. Nothing of the original railway formation could be used – and therefore all that infrastructure that rail trail users come to see and appreciate would not be experienced. Instead, they would encounter merely a trail alongside a railway line, and cyclists and other potential users would have to deal with all the hills that such an alignment would have (instead of a reasonably flat formation that a former railway provides). As well as needing to replicate the railway formation and bridges, a trail beside an operating (probably electrified) railway would necessitate the establishment of approximately 213km of 1.8m – 2.4m high chain link fencing – as that would likely be the requirement imposed by the authorities. Such a fence would cost approximately \$12 million – on top of the costs of building bridges and the embankments that would be needed to cross low-lying areas and all the other costs of trail building. In addition, the installation of a 1.8m – 2.4m high fence between the trail and the railway would detract substantially from users' experience.
- The proposed Monaro Rail Trail is well situated to take advantage of the nearby ACT market. Canberra is known for its cycle network and above average bicycle usage. Having such a large market close to the proposed trail augurs well for the usage of the trail, should it be built. In addition, by using Queanbeyan Railway Station as the northern terminus also enables trail users from Sydney catching a train to the trailhead.

- ✚ The issues raised during consultation by those opposed to the proposed rail trail are similar to those raised in almost all other rail trail projects. Discussions in the community have identified the following key issues:
 - The need for numerous stock crossings (to enable stock and machinery to pass from one side of the corridor to the other after it is fenced).
 - The need for fencing of the corridor.
 - Biosecurity issues, especially the potential for the spread of weeds (and in particular African Love Grass).
 - Trail users witnessing (unfortunate) farm management practices such as the shooting of kangaroos and wombats, and cattle in poor health due to drought.
 - The need for toilets at regular intervals.
 - A preference (by a few) for the return of a regular commuter train on the line.
 - The dangers involved at times of extreme weather (such as heat in summer, and freezing temperatures and snow/sleet in winter) and the need for measures to keep trail users safe.



The siding shed at Jincumbilly would provide an excellent shelter in times of inclement weather. It would also provide a suitable framework for a toilet within the trailhead development.

- ✚ Climatic conditions in this southern part of NSW are different to most other areas of NSW where rail trails are proposed, and different/additional infrastructure, maintenance regimes and management may be required.
- ✚ The corridor once hosted small 'tourist trains' operations which, had they continued to operate, would have caused a number of issues for the development of the rail trail. It is not known when, if ever, these tourist trains may return. There is likely to be a number of issues preventing anyone from establishing a viable tourist train, including funding for establishment of the operation (such as rolling stock and track upgrades and repairs), accreditation and safety issues, experienced and accredited drivers, ongoing maintenance and volunteers. As with the development of a rail trail, a business case would need to clearly demonstrate the worth of proceeding with any form of tourist train.

- ✚ Unlike the majority of disused railway corridors throughout Australia, this corridor is almost devoid of discontinuities and encroachments. Often sheds and stock yards are located on the corridor, roads are built, machines and produce are stored. None of this activity appears to have occurred in the corridor sections viewed. This will be beneficial when it comes to commencing development of the trail, should it proceed, as it means that there are no adjoining landowners (responsible for the encroachments) will be 'disadvantaged' and be made to cease these activities. However, as the southern half was constructed without fencing, stock have always been allowed to freely wander on and across the corridor. This will require careful management in the detailed design of the proposed trail.
- ✚ There appears a higher level of support from the business community than observed in other rail trail proposals in NSW. This overt support is evidenced by the prominent display of orange bicycles in shop/business windows, stickers prominently displayed on shop windows in cafes, bakeries, general stores, hotels and other businesses.



There is evidence of support for the proposed rail trail within the communities through which this proposed rail trail would pass such as orange bicycles in shop windows, signs on shop windows and this display of orange bicycles on the actual railway corridor.

8.2 Potential Topics for Interpretation

Field work, research, discussions with people in the community and general observations of the railway corridor and the region in general has enabled a list of possible topics for interpretation. These include:

- ✚ Indigenous heritage on the Monaro
- ✚ History of the Maneroo District
- ✚ Exploration and discovery of the Monaro
- ✚ The treeless plains
- ✚ The Great Dividing Range
- ✚ The topography and soils
- ✚ Pioneers and settlement

- ✚ Surveyor Charles Scrivener
- ✚ Bushrangers
- ✚ Sheep and wool farming
- ✚ The railway history
- ✚ Use of the railway (wood, timber, meat, etc)
- ✚ Railways workers along the line
- ✚ Transporting timber, cattle and sheep
- ✚ MacLaughlin meat works
- ✚ The lost locomotive and the search by Spitfire
- ✚ Floods
- ✚ Fishing in the Murrumbidgee catchment
- ✚ The Petrov Affair

This is just a starting list. Should the proposed rail trail proceed to the next stage (i.e. the preparation of a detailed trail development plan) a complete traverse of the former railway corridor, together with additional consultation with the adjoining landowners and the community in general, will elicit many more topics for interpretation and stories that could be told along the trail.

The publication *Cooma-Monaro Shire – Thematic History 1823 – 1945 – September 2007* (commissioned by the former Cooma-Monaro Shire Council and prepared by Suzannah Plowman, Victoria Design & Management Pty Ltd) provides additional information and likely interpretive topics.

In addition, respondents to the on-line survey conducted during the preparation of this Feasibility Study (via Council's Your Say web page) contributed ideas for interpretive topics.



The old MacLaughlin Meatworks (south of Nimmitabel on the disused railway) is a fascinating story and one that should be told should the rail trail be developed.

SECTION 9 – ESTIMATES OF PROBABLE COSTS

9.1 Condition of Bridges and Costs Associated with Conversion for Trail Use

Transplan Pty Ltd commissioned Wood Research and Development (WRD) (engineers specialising in timber bridges) to carry out inspections and assessments of the most significant bridges along the corridor.

Although preliminary bridge assessments have been carried out on a number of the most significant bridges, further detailed assessments will be required on all bridges prior to construction of the trail to accurately establish the condition of timber bridge components.

As noted in the report by WRD (see Appendix 5), an essential step in evaluating the condition of a structure is undertaking a visual inspection. The visual aspect of the investigation is used to pick up missing or failed elements, cracks and splits, cavitation, connection details, abutment condition, undermining and debris build-up, among other important information. Gathering this information is essential for completing a comprehensive investigation and taking into account the surroundings in addition to the main structural elements. The photographs (called Figures in the engineering report) provide a summary of findings as well as the description of each bridge.

The Condition State Rating system set out below in Table 7 has been developed by Wood Research and Development, through timber inspection experience, to clearly describe the condition of the elements inspected.

Table 7 - Condition State Ratings

Condition State	Subjective Rating	Estimated Remaining Life Span		Description
1	Good	100%	80 years	Like new condition and free of defects.
2	Fair	80%	64 years	Free of defects affecting structural performance, integrity and durability. Deterioration of a minor nature in the protective coating and/or parent material is evident.
3	Poor	30%	24 years	Defects affecting the durability/serviceability which may require monitoring and/or remedial action or inspection by a structural engineer. Component or element shows marked and advancing deterioration including loss of protective coating and minor loss of section from the parent material is evident. Intervention is normally required. Defects affecting the durability/serviceability which may require monitoring and/or remedial action or inspection by a structural engineer. Component or element shows marked and advancing deterioration including loss of protective coating and minor loss of section from the parent material is evident. Intervention is normally required.
4	Very Poor	5%	4 years	Defects affecting the performance and structural integrity of the structure which require urgent action as determined by a detailed structural engineering inspection. Component or element shows advanced deterioration, loss of section from the parent material, signs of overstressing or evidence that it is acting differently to its intended design mode or function.
5	Unsafe	1%	Less than 2 years	Bridge should be closed. Structural integrity is severely compromised, and the structure must be taken out of service until a structural engineer has inspected the structure and recommended the required remedial action.

Michelago Creek Bridge

Overall Michelago Creek Bridge is in poor condition (CSR of 3) with significant works required to repurpose the bridge for pedestrian and cycle use. This rating does not speak to the load rating. A load rating of the structure was not completed for this report. This condition rating was based from a small sample size of data collected and it is highly recommended to conduct a detailed Level 2/3 inspection of the entire bridge. This will gain a higher level of accuracy for the recommended repair options.

Ingalara Creek Bridge

Overall Ingalara Creek Bridge is in poor condition (CSR of 3) with significant works required to repurpose the bridge for pedestrian and cycle use. This rating does not speak to the load rating. A load rating of the structure was not completed for this report. This condition rating was based from a small sample size of data collected and it is highly recommended to conduct a detailed Level 2/3 inspection of the entire bridge. This will gain a higher level of accuracy for the recommended repair options.

Colyer Creek Bridge

Overall Colyer Creek Bridge is in similar condition to Michelago Creek Bridge which is poor condition (CSR of 3) with significant works required to repurpose the bridge for pedestrian and cycle use. This rating does not speak to the load rating. A load rating of the structure was not completed for this report. This condition rating was based from a very small sample size of data collected and it is highly recommended to conduct a detailed Level 2/3 inspection of the entire bridge.

Bredbo River Bridge

Overall Bredbo River Bridge is in poor condition (CSR of 3) with significant works required to repurpose the bridge for pedestrian and cycle use. This rating does not speak to the load rating. A load rating of the structure was not completed for this report. This condition rating was based from a small sample size of data collected and it is highly recommended to conduct a detailed Level 2/3 inspection of the entire bridge.

Chakola Bridge (Numeralla River)

Overall Chakola Bridge is in poor condition (CSR of 3) with significant works required to repurpose the bridge for pedestrian and cycle use. This rating does not speak to the load rating. A load rating of the structure was not completed for this report. This condition rating was based from a small sample size of data collected and it is highly recommended to conduct a detailed Level 2/3 inspection of the entire bridge.

The following is a summary of the Condition State Rating (CSR) for each bridge:

1. Michelago Creek Bridge

a. Substructure	CSR 3
b. Superstructure	CSR 3
c. Deck	CSR 3
d. Overall	CSR 3

2. Ingalara Creek Bridge	
a. Substructure	CSR 3
b. Superstructure	CSR 3
c. Deck	CSR 3
d. Overall	CSR 3
3. Colyer Creek Bridge	
a. Substructure	CSR 3
b. Superstructure	CSR 3
c. Deck	CSR 3
d. Overall	CSR 3
4. Bredbo River Bridge	
a. Substructure	CSR 4
b. Superstructure	CSR 3
c. Deck	CSR 3
d. Overall	CSR 3
5. Chakola Bridge (Numeralla River)	
a. Substructure	CSR 4
b. Superstructure	CSR 4
c. Deck	CSR 3
d. Overall	CSR 4

As a result of these assessments the appropriate costs to repair have been included in the tables that follow

9.2 Basis of Cost Estimates

The investigations undertaken during the fieldwork associated with this project and the consultation carried out enable a reasonable indication of the work required to bring about the development of the proposed Monaro Rail Trail project.

The costs of construction of the proposed rail trail is an estimate of probable costs only. Accurate costs can only be determined, firstly, by the compilation of more detailed works lists accomplished through individual, detailed trail development plans for each section of the proposed rail trail and, secondly, via a tendering process.

The costs for development of the trail (bridges, trail construction, etc) are based on conditions likely to be encountered during construction. As accurate measurements have not been made, it is not possible to be precise in quantifying costs. It is only after detailed trail development plans are prepared (including a full traverse of the corridor) that more definite quantities and costs can be provided.

For the purposes of determining costs for this Feasibility Study, the per unit construction rates have been included in the tables, along with an estimate of the total length or quantity.

For ease of calculating costs, and as a possible future guide to development of the rail trail in stages, the corridor was divided into 6 segments. (See Plans 1 – 6 of Appendix 6).

Table 8 – Section 1 – Queanbeyan to Michelago (49km)

Activity	Unit	Qty	Rate	\$
Allowance for minimal to moderate clearing of corridor between Queanbeyan and Michelago (49km)	metres	49,000	\$3	\$147,000
Erection of fencing along corridor:				
• double fencing (allowance)	metres	24,530	\$20	\$490,600
• single fencing (allowance)	metres	9,970	\$10	\$99,700
• no fencing	metres	14,500	\$0	\$0
Allowance for cleaning of, and earthworks around, pipe and box culverts under railway embankment	units	60	\$400 (average)	\$24,000
Allowance for minor repairs and/or refurbishment of bridge structures (abutments, new decking, handrails etc) (or installation of new pre-fabricated bridges).	metres	185 (16 bridges)	\$6,000	\$1,110,000
Allowance for delineator posts, guard rails or barrier fencing on high embankments				\$30,000
Allowance for gravelling of trail to 2.5m wide, compacted to 150mm thickness [#]	Lineal metres	49,000	\$60	\$2,940,000
Allowance for purchase and installation of miscellaneous signage (directional / distance, warning, etiquette, private property, no trespassing, emergency etc)	metre	49,000	\$2	\$98,000
Allowance for construction of road crossings at major roads (other than Monaro Highway 100kph zone)		4	\$11,500	\$46,000
Allowance for construction of road crossings (i.e. underpasses) of Monaro Highway in 100kph zone		0	\$350,000	\$0

Allowance for construction of road crossings at minor roads and driveways		2	\$2,820	\$5,640
Allowance for retain/renovate/repaint railway signage and significant railway heritage infrastructure (signs, signals, switches)		-	-	\$5,000
Allowance for rehabilitation of drainage through cuttings	metre	2,000	\$25	\$50,000
Allowance for trailside bench seats and trailside shelters		3	\$3,000	\$9,000
Allowance for removal of cross fences	unit	10	\$300	\$3,000
Allowance for installation of new structures at property boundaries to replace existing cattle stops	unit	5	\$4,000	\$20,000
Allowance for installation of stock crossings (grids, gates, etc) to permit stock/machinery to cross from one side of corridor to the other	unit	20	\$4,000	\$80,000
Allowance for construction of 1 shelter between Hume and Royalla		1	\$10,000	\$10,000
Allowance for installation of toilets (system and shed)	unit	2	\$20,000	\$40,000
Allowance for slashing bridle trail alongside main trail (if horses are to be permitted)	metres	49,000	\$0.50	\$24,500
Allowance for preparation and installation of interpretive signage	unit	5	\$4,000	\$20,000
Allowance for sculpture/artwork	unit	1	\$10,000	\$10,000
Allowance for Trail Directional Markers (incorporating emergency markers) to be placed along trail every 1 km.	Ea.	49	\$600	\$29,400
Allowance for landowner requests (e.g. fencing and vegetation screening)				\$10,000

Allowance for cable locators and traffic management				\$20,000
Allowance for adjoining landholder consultation				\$5,000
Allowance for boot and bike tyre cleaning stations	units	2	\$3,000	\$6,000
Allowance for weed spraying before/during construction				\$10,000
Allowance for surveying of property boundaries/fencing alignment	Per/km	49km	\$3,000	\$147,000
Queanbeyan trailhead facilities:				
<ul style="list-style-type: none"> Install map panel 	units	1	\$5,500	\$5,000
<ul style="list-style-type: none"> Directional signage to trailhead from regional and local roads 	units	4	\$600	\$2,400
<ul style="list-style-type: none"> Install roadside "Trailhead" signage on local roads 	units	2	\$1,600	\$3,200
<ul style="list-style-type: none"> Install picnic shelter and table 		1	\$8,000	\$8,000
<ul style="list-style-type: none"> Install bike parking rails 	set	1	\$1,000	\$1,000
<ul style="list-style-type: none"> Allowance for trailhead sculptures / artwork 		2	\$15,000	\$30,000
Michelago trailhead facilities:				
<ul style="list-style-type: none"> Install map panel 	units	1	\$5,500	\$5,000
<ul style="list-style-type: none"> Directional signage to trailhead from regional and local roads 	units	4	\$600	\$2,400
<ul style="list-style-type: none"> Install roadside "Trailhead" signage on local roads 	units	2	\$1,600	\$3,200
<ul style="list-style-type: none"> Install picnic shelter and table 		1	\$8,000	\$8,000
<ul style="list-style-type: none"> Install bike parking rails 	set	1	\$1,000	\$1,000
<ul style="list-style-type: none"> Allowance for trailhead sculptures / artwork 		2	\$15,000	\$30,000
<i>Sub-total</i>				\$5,589,040

Approvals, permits, applications, designs, specifications, engineering assessment of timber bridges (2.5% of maximum estimated expenditure - \$5,589,040).	%		2.5	\$139,730
Contingency amount (15% of maximum estimated expenditure - \$5,589,040).	%		15.0	\$838,360
Project management (5% of maximum estimated expenditure - \$5,589,040).	%		5.0	\$279,450
Total (not incl GST)				\$6,846,580

Table 9 - Section 2 – Michelago to Bredbo (30km)

Activity	Unit	Qty	Rate	\$
Allowance for minimal to moderate clearing of corridor between Michelago and Bredbo (30km)	metres	30,000	\$3	\$90,000
Erection of fencing along corridor:				
• double fencing (allowance)	metres	22,800	\$20	\$456,000
• single fencing (allowance)	metres	1,800	\$10	\$18,000
• no fencing	metres	5,400	\$0	\$0
Allowance for cleaning of, and earthworks around, pipe and box culverts under railway embankment	units	30	\$400 (average)	\$12,000
Allowance for minor repairs and/or refurbishment of bridge structures (abutments, new decking, handrails etc) (or installation of new pre-fabricated bridges).	metres	148 (19 bridges)	\$6,000	\$888,000
Allowance for major repairs and/or refurbishment of bridge structures (abutments, new decking, handrails etc) on Michelago, Ingalaria and Colyer bridges.				See separate table below

Colinton Tunnel – allowance for installation of solar lighting				\$30,000
Allowance for gravelling of trail to 2.5m wide, compacted to 150mm thickness [#]	Lineal metres	30,000	\$60	\$1,800,000
Allowance for purchase and installation of miscellaneous signage (directional / distance, warning, etiquette, private property, no trespassing, emergency etc)	metre	30,000	\$2	\$60,000
Allowance for construction of road crossings at major roads (other than Monaro Highway 100kph zone)	0		\$11,500	\$0
Allowance for construction of road crossings (i.e. underpasses) of Monaro Highway in 100kph zone	2		\$350,000	\$700,000
Allowance for construction of road crossings at minor roads and driveways		5	\$2,820	\$14,100
Allowance for retain/renovate/repaint railway signage and significant railway heritage infrastructure (signs, signals, switches)		-	-	\$5,000
Allowance for rehabilitation of drainage through cuttings	metre	2,000	\$25	\$50,000
Allowance for trailside bench seats and trailside shelters		2	\$3,000	\$6,000
Allowance for removal of cross fences	unit	10	\$300	\$3,000
Allowance for installation of new structures at property boundaries to replace existing cattle stops	unit	5	\$4,000	\$20,000
Allowance for installation of stock crossings (grids, gates, etc) to permit stock/machinery to cross from one side of corridor to the other	unit	20	\$4,000	\$80,000
Allowance for construction of 2 shelters (one between Michelago and road crossing		2	\$10,000	\$20,000

of Monaro Hwy south of Michelago; and one between Colinton and Scottsdale)				
Allowance for installation of toilets (system and shed)	unit	2	\$20,000	\$40,000
Allowance for slashing bridle trail alongside main trail (if horses are to be permitted)	metres	30,000	\$0.50	\$15,000
Allowance for preparation and installation of interpretive signage	unit	5	\$4,000	\$20,000
Allowance for sculpture/artwork	unit	1	\$10,000	\$10,000
Allowance for Trail Directional Markers (incorporating emergency markers) to be placed along trail every 1 km.	Ea.	30	\$600	\$18,000
Allowance for landowner requests (e.g. fencing and vegetation screening)				\$10,000
Allowance for cable locators and traffic management				\$20,000
Allowance for adjoining landholder consultation				\$5,000
Allowance for boot and bike tyre cleaning stations	units	2	\$3,000	\$6,000
Allowance for weed spraying before/during construction				\$10,000
Allowance for surveying of property boundaries/fencing alignment	Per/km	30km	\$3,000	\$90,000
Michelago trailhead facilities:				
<ul style="list-style-type: none"> costed in table above 				\$0
Bredbo trailhead facilities:				
<ul style="list-style-type: none"> Install map panel 	units	1	\$5,500	\$5,500
<ul style="list-style-type: none"> Install directional signage to trailhead from regional and local roads 	units	2	\$600	\$1,200

• Install roadside “Trailhead” signage on local roads	units	2	\$1,600	\$3,200
• Install picnic shelter and table		1	\$4,000	\$4,000
• Install bike parking rails	set	1	\$1,000	\$1,000
<i>Sub-total</i>				<i>\$4,511,000</i>
Approvals, permits, applications, designs, specifications, engineering assessment of timber bridges (2.5% of maximum estimated expenditure - \$4,511,000)	%		2.5	\$112,780
Contingency amount (15% of maximum estimated expenditure - \$4,511,000).	%		15.0	\$676,650
Project management (5% of maximum estimated expenditure - \$4,511,000).	%		5.0	\$225,550
<i>Total (not incl GST)</i>				<i>\$5,525,980</i>

Table 10 - Major Bridges between Michelago and Bredbo

Activity	Unit	Qty	Rate	\$
Allowance for major refurbishment of Michelago Bridge.	metres	74m		\$850,000
Allowance for major refurbishment of Ingalara Bridge.	metres	75m		\$1,000,000
Allowance for major refurbishment of Colyer Bridge.	metres	50m		\$580,000
<i>Sub-total</i>				<i>\$2,430,000</i>
Contingency amount (25%)	%		25.0	\$607,500
<i>Total (not incl GST)</i>				<i>\$3,037,500</i>

Table 11 - Section 3 – Bredbo to Cooma (36km)

Activity	Unit	Qty	Rate	\$
Allowance for minimal to moderate clearing of corridor between Bredbo and Cooma (36km)	metres	36,000	\$3	\$108,000
Erection of fencing along corridor:				
<ul style="list-style-type: none"> double fencing (allowance) 	metres	30,900	\$20	\$618,000
<ul style="list-style-type: none"> single fencing (allowance) 	metres	2,500	\$10	\$25,000
<ul style="list-style-type: none"> no fencing 	metres	2,600	\$0	\$0
Allowance for cleaning of, and earthworks around, pipe and box culverts under railway embankment	units	60	\$400 (average)	\$24,000
Allowance for minor repairs and/or refurbishment of bridge structures (abutments, new decking, handrails etc) (or installation of new pre-fabricated bridges).	metres	354 (19 bridges)	\$6,000	\$2,124,000
Allowance for major repairs and/or refurbishment of bridge structures (abutments, new decking, handrails etc) on Bredbo and Chakola (Numeralla) bridges.				See separate table below
Allowance for gravelling of trail to 2.5m wide, compacted to 150mm thickness [#]	Lineal metres	36,000	\$60	\$2,160,000
Allowance for purchase and installation of miscellaneous signage (directional / distance, warning, etiquette, private property, no trespassing, emergency etc)	metre	36,000	\$2	\$72,000
Allowance for construction of road crossings at major roads (other than Monaro Highway 100kph zone)		3	\$11,500	\$34,500

Allowance for construction of road crossings (i.e. underpasses) of Monaro Highway in 100kph zone		0	\$350,000	\$0
Allowance for construction of road crossings at minor roads and driveways		4	\$2,820	\$11,280
Allowance for retain/renovate/repaint railway signage and significant railway heritage infrastructure (signs, signals, switches)			-	\$5,000
Allowance for rehabilitation of drainage through cuttings	metre	1,000	\$25	\$25,000
Allowance for trailside bench seats and trailside shelters		2	\$3,000	\$6,000
Allowance for removal of cross fences	unit	10	\$300	\$3,000
Allowance for installation of new structures at property boundaries to replace existing cattle stops	unit	5	\$4,000	\$20,000
Allowance for installation of stock crossings (grids, gates, etc) to permit stock/machinery to cross from one side of corridor to the other	unit	30	\$4,000	\$120,000
Allowance for construction of 2 shelters (one between Bredbo and Chakola, and one between Chakola and Bunyan)		2	\$10,000	\$20,000
Allowance for installation of toilets (system and shed)	unit	2	\$20,000	\$40,000
Allowance for slashing bridle trail alongside main trail (if horses are to be permitted)	metres	36,000	\$0.50	\$18,000
Allowance for preparation and installation of interpretive signage	unit	5	\$4,000	\$20,000
Allowance for sculpture/artwork	unit	1	\$10,000	\$10,000

Allowance for Trail Directional Markers (incorporating emergency markers) to be placed along trail every 1 km.	Ea.	36	\$600	\$21,600
Allowance for landowner requests (e.g. fencing and vegetation screening)				\$10,000
Allowance for cable locators and traffic management				\$20,000
Allowance for adjoining landholder consultation				\$5,000
Allowance for boot and bike tyre cleaning stations	units	2	\$3,000	\$6,000
Allowance for weed spraying before/during construction				\$10,000
Allowance for surveying of property boundaries/fencing alignment	Per/km	36km	\$3,000	\$108,000
Bredbo trailhead facilities:				
<ul style="list-style-type: none"> costed in table above 				\$0
Cooma trailhead facilities:				
<ul style="list-style-type: none"> Install map panel 	units	1	\$5,500	\$5,500
<ul style="list-style-type: none"> Install directional signage to trailhead from regional and local roads 	units	2	\$600	\$1,200
<ul style="list-style-type: none"> Install roadside "Trailhead" signage on local roads 	units	2	\$1,600	\$3,200
<ul style="list-style-type: none"> Install picnic shelter and table 		1	\$4,000	\$4,000
<ul style="list-style-type: none"> Install bike parking rails 	set	1	\$1,000	\$1,000
<i>Sub-total</i>				\$5,659,280
Approvals, permits, applications, designs, specifications, engineering assessment of timber bridges (2.5% of maximum estimated expenditure - \$5,659,280).	%		2.5	\$141,480

Contingency amount (15% of maximum estimated expenditure - \$5,659,280).	%		15.0	\$848,890
Project management (5% of maximum estimated expenditure - \$5,659,280).	%		5.0	\$282,960
Total (not incl GST)				\$6,932,610

Table 12 - Major Bridges between Bredbo and Cooma

Activity	Unit	Qty	Rate	\$
Allowance for major refurbishment of Bredbo Bridge.	metres	130m		\$1,750,000
Allowance for major refurbishment of Chakola (Numeralla) Bridge.	metres	390m		\$5,250,000
<i>Sub-total</i>				<i>\$7,000,000</i>
Contingency amount (25%)	%		25.0	\$1,750,000
Total (not incl GST)				\$8,750,000

Table 13 - Section 4 – Cooma to Nimmitabel (38km)

Activity	Unit	Qty	Rate	\$
Allowance for minimal to moderate clearing of corridor between Cooma and Nimmitabel (38km)	metres	38,000	\$3	\$114,000
Erection of fencing along corridor:				
• double fencing (allowance)	metres	32,190	\$20	\$643,800
• single fencing (allowance)	metres	5,010	\$10	\$50,100
• no fencing	metres	800	\$0	\$0
Allowance for cleaning of, and earthworks around, pipe and box culverts under railway embankment	units	40	\$400	\$16,000
Allowance for minor repairs and/or refurbishment of bridge structures (abutments, new decking, handrails etc) (or installation of new pre-fabricated bridges).	metres	207m (21 bridges)	\$6,000	\$1,242,000
Allowance for major repairs and/or refurbishment of bridge structures (abutments, new decking, handrails etc)	metres	0	\$11,000	\$0
Allowance for gravelling of trail to 2.5m wide, compacted to 150mm thickness [#]	Lineal metres	38,000	\$60	\$2,280,000
Allowance for purchase and installation of miscellaneous signage (directional / distance, warning, etiquette, private property, no trespassing, emergency etc)	metre	38,000	\$2	\$76,000
Allowance for construction of road crossings at major roads (other than Monaro Highway 100kph zone)		1	\$11,500	\$11,500
Allowance for construction of road crossings (i.e. underpasses) of Monaro Highway in 100kph zone		2	\$350,000	\$700,000

Allowance for construction of road crossings at minor roads and driveways		10	\$2,820	\$28,200
Allowance for retain/renovate/repaint railway signage and significant railway heritage infrastructure (signs, signals, switches)			-	\$5,000
Allowance for rehabilitation of drainage through cuttings	metre	1,000	\$25	\$25,000
Allowance for trailside bench seats and trailside shelters		2	\$3,000	\$6,000
Allowance for removal of cross fences	unit	10	\$300	\$3,000
Allowance for installation of new structures at property boundaries to replace existing cattle stops	unit	5	\$4,000	\$20,000
Allowance for installation of stock crossings (grids, gates, etc) to permit stock/machinery to cross from one side of corridor to the other	unit	30	\$4,000	\$120,000
Allowance for construction of 2 shelters (one between Rock Flat and Coonerang, and one between Coonerang and Bobingah)		2	\$10,000	\$20,000
Allowance for installation of toilets (system and shed)	unit	2	\$20,000	\$40,000
Allowance for slashing bridle trail alongside main trail (if horses are to be permitted)	metres	38,000	\$0.50	\$19,000
Allowance for refurbishment of Coonerang siding and removal of asbestos		1	\$20,000	\$20,000
Allowance for preparation and installation of interpretive signage	unit	5	\$4,000	\$20,000
Allowance for sculpture/artwork	unit	1	\$10,000	\$10,000

Allowance for Trail Directional Markers (incorporating emergency markers) to be placed along trail every 1 km.	Ea.	38	\$600	\$22,800
Allowance for landowner requests (e.g. fencing and vegetation screening)				\$10,000
Allowance for cable locators and traffic management				\$20,000
Allowance for adjoining landholder consultation				\$5,000
Allowance for boot and bike tyre cleaning stations	units	2	\$3,000	\$6,000
Allowance for weed spraying before/during construction				\$10,000
Allowance for surveying of property boundaries/fencing alignment	Per/km	38km	\$3,000	\$114,000
Cooma trailhead facilities:				
<ul style="list-style-type: none"> costed in table above 				\$0
Nimmitabel trailhead facilities:				
<ul style="list-style-type: none"> Install map panel 	units	1	\$5,500	\$5,500
<ul style="list-style-type: none"> Construct parking area – including horse float parking (100m²) 	m ²	100	\$75	\$7,500
<ul style="list-style-type: none"> Install roadside “Trailhead” signage on access road 	units	2	\$1,600	\$3,200
<ul style="list-style-type: none"> Install picnic shelter/table 		1	\$4,000	\$4,000
<ul style="list-style-type: none"> Install bike parking rails 	set	1	\$1,000	\$1,000
<i>Sub-total</i>				<i>\$5,678,600</i>
Approvals, permits, applications, designs, specifications, engineering assessment of timber bridges (2.5% of maximum estimated expenditure - \$5,678,600).	%		2.5	\$141,970

Contingency amount (15% of maximum estimated expenditure - \$5,678,600).	%		15.0	\$851,790
Project management (5% of maximum estimated expenditure - \$5,678,600).	%		5.0	\$283,930
Total (not incl GST)				\$6,956,290

Table 14 - Section 5 – Nimmitabel to Jincumbilly (37km)

Activity	Unit	Qty	Rate	\$
Allowance for minimal to moderate clearing of corridor between Nimmitabel and Jincumbilly (37km)	metres	37,000	\$3	\$111,000
Erection of fencing along corridor:				
• double fencing (allowance)	metres	36,600	\$20	\$732,000
• single fencing (allowance)	metres	400	\$10	\$4,000
• no fencing	metres	0	\$0	\$0
Allowance for cleaning of, and earthworks around, pipe and box culverts under railway embankment	units	60	\$400 (average)	\$24,000
Allowance for minor repairs and/or refurbishment of bridge structures (abutments, new decking, handrails etc) (or installation of new pre-fabricated bridges).	metres	262 (14 bridges)	\$6,000	\$1,572,000
Allowance for major repairs and/or refurbishment of bridge structures (abutments, new decking, handrails etc)	metres	0	\$11,000	\$0
Allowance for gravelling of trail to 2.5m wide, compacted to 150mm thickness [#]	Lineal metres	37,000	\$60	\$2,220,000

Allowance for purchase and installation of miscellaneous signage (directional / distance, warning, etiquette, private property, no trespassing, emergency etc)	metre	37,000	\$2	\$74,000
Allowance for construction of road crossings at major roads (other than Monaro Highway 100kph zone)		3	\$11,500	\$34,500
Allowance for construction of road crossings (i.e. underpasses) of Monaro Highway in 100kph zone		0	\$350,000	\$0
Allowance for construction of road crossings at minor roads and driveways		6	\$2,820	\$16,920
Allowance for retain/renovate/repaint railway signage and significant railway heritage infrastructure (signs, signals, switches)		-	-	\$5,000
Allowance for rehabilitation of drainage through cuttings	metre	1,000	\$25	\$25,000
Allowance for trailside bench seats and trailside shelters		3	\$3,000	\$9,000
Allowance for removal of cross fences	unit	10	\$300	\$3,000
Allowance for installation of new structures at property boundaries to replace existing cattle stops	unit	5	\$4,000	\$20,000
Allowance for installation of stock crossings (grids, gates, etc) to permit stock/machinery to cross from one side of corridor to the other	unit	35	\$4,000	\$140,000
Allowance for construction of 2 shelters (one between Maclaughlin Station and Holts Flat, and one between Holts Flat and Jincumbilly)		2	\$10,000	\$20,000
Allowance for installation of toilets (system and shed)	unit	2	\$20,000	\$40,000

Allowance for slashing bridle trail alongside main trail (if horses are to be permitted)	metres	37,000	\$0.50	\$18,500
Allowance for refurbishment of Holts Flat siding shed and removal of asbestos		1	\$20,000	\$20,000
Allowance for making safe Maclaughlin Station meat works building				\$50,000
Allowance for preparation and installation of interpretive signage	unit	5	\$4,000	\$20,000
Allowance for sculpture/artwork	unit	1	\$10,000	\$10,000
Allowance for Trail Directional Markers (incorporating emergency markers) to be placed along trail every 1 km.	Ea.	37	\$600	\$22,200
Allowance for landowner requests (e.g. fencing and vegetation screening)				\$10,000
Allowance for cable locators and traffic management				\$20,000
Allowance for adjoining landholder consultation				\$5,000
Allowance for boot and bike tyre cleaning stations	units	2	\$3,000	\$6,000
Allowance for weed spraying before/during construction				\$10,000
Allowance for surveying of property boundaries/fencing alignment	Per/km	37km	\$3,000	\$111,000
Nimmitabel trailhead facilities:				
<ul style="list-style-type: none"> costed in table above 				\$0
Jincumbilly trailhead facilities:				
<ul style="list-style-type: none"> Construct parking area (200m²) 	m ²	200	\$75	\$15,000
<ul style="list-style-type: none"> Install map panel 	units	1	\$5,500	\$5,500
<ul style="list-style-type: none"> Install directional signage to trailhead on regional roads 	units	2	\$600	\$1,200

• Install roadside “Trailhead” signage on access road	units	1	\$1,600	\$1,600
• Install picnic shelter and table		1	\$4,000	\$4,000
• Install bike parking rails	set	1	\$1,000	\$1,000
• Allowance for refurbishment of Jincumbilly siding and shed and removal of asbestos			\$20,000	\$20,000
<i>Sub-total</i>				\$5,401,420
Approvals, permits, applications, designs, specifications, engineering assessment of timber bridges (2.5% of maximum estimated expenditure - \$5,401,420).	%		2.5	\$135,040
Contingency amount (15% of maximum estimated expenditure - \$5,401,420).	%		15.0	\$810,210
Project management (5% of maximum estimated expenditure - \$5,401,420).	%		5.0	\$270,070
<i>Total (not incl GST)</i>				\$6,616,740

Table 15 - Section 6 – Jincumbilly to Bombala (24km)

Activity	Unit	Qty	Rate	\$
Allowance for minimal to moderate clearing of corridor between Jincumbilly and Bombala (24km)	metres	24,000	\$3	\$72,000
Erection of fencing along corridor:				
• double fencing (allowance)	metres	21,400	\$20	\$428,000
• single fencing (allowance)	metres	2,100	\$10	\$21,000
• no fencing	metres	500	\$0	\$0
Allowance for cleaning of, and earthworks around, pipe and box culverts under railway embankment	units	50	\$400 (average)	\$20,000

Allowance for minor repairs and/or refurbishment of bridge structures (abutments, new decking, handrails etc) (or installation of new pre-fabricated bridges).	metres	0	\$6,000	\$0
Allowance for major repairs and/or refurbishment of bridge structures (abutments, new decking, handrails etc)	metres	0	\$11,000	\$0
Allowance for gravelling of trail to 2.5m wide, compacted to 150mm thickness [#]	Lineal metres	24,000	\$60	\$1,440,000
Allowance for purchase and installation of miscellaneous signage (directional / distance, warning, etiquette, private property, no trespassing, emergency etc)	metre	24,000	\$2	\$48,000
Allowance for construction of road crossings at major roads (other than Monaro Highway 100kph zone)		4	\$11,500	\$46,000
Allowance for construction of road crossings (i.e. underpasses) of Monaro Highway in 100kph zone		0	\$350,000	\$0
Allowance for construction of road crossings at minor roads and driveways		6	\$2,820	\$16,920
Allowance for retain/renovate/repaint railway signage and significant railway heritage infrastructure (signs, signals, switches)		-	-	\$5,000
Allowance for rehabilitation of drainage through cuttings	metre	1,000	\$25	\$25,000
Allowance for trailside bench seats and trailside shelters		3	\$3,000	\$9,000
Allowance for removal of cross fences	unit	10	\$300	\$3,000
Allowance for installation of new structures at property boundaries to replace existing cattle stops	unit	5	\$4,000	\$20,000

Allowance for installation of stock crossings (grids, gates, etc) to permit stock/machinery to cross from one side of corridor to the other	unit	33	\$4,000	\$132,000
Allowance for construction of 2 shelters (one between Jincumbilly and Bukalong, and between Bukalong and Bombala)		2	\$10,000	\$20,000
Allowance for installation of toilets (system and shed)	unit	2	\$20,000	\$40,000
Allowance for slashing bridle trail alongside main trail (if horses are to be permitted)	metres	24,000	\$0.50	\$12,000
Allowance for refurbishment of Bukalong siding and shed and removal of asbestos			\$20,000	\$20,000
Allowance for preparation and installation of interpretive signage	unit	5	\$4,000	\$20,000
Allowance for sculpture/artwork	unit	1	\$10,000	\$10,000
Allowance for Trail Directional Markers (incorporating emergency markers) to be placed along trail every 1 km.	Ea.	24	\$600	\$14,400
Allowance for landowner requests (e.g. fencing and vegetation screening)				\$10,000
Allowance for cable locators and traffic management				\$20,000
Allowance for adjoining landholder consultation				\$5,000
Allowance for boot and bike tyre cleaning stations	units	2	\$3,000	\$6,000
Allowance for weed spraying before/during construction				\$10,000
Allowance for surveying of property boundaries/fencing alignment	Per/km	24km	\$3,000	\$72,000

Jincumbilly trailhead facilities:				
<ul style="list-style-type: none"> costed in table above 				\$0
Bombala trailhead facilities:				
<ul style="list-style-type: none"> Construct parking area (200m²) 	m ²	200	\$75	\$15,000
<ul style="list-style-type: none"> Install map panel 	units	1	\$5,500	\$5,500
<ul style="list-style-type: none"> Install directional signage to trailhead on regional roads 	units	2	\$600	\$1,200
<ul style="list-style-type: none"> Install roadside "Trailhead" signage on access road 	units	1	\$1,600	\$1,600
<ul style="list-style-type: none"> Install picnic shelter and table 		1	\$4,000	\$4,000
<ul style="list-style-type: none"> Install bike parking rails 	set	1	\$1,000	\$1,000
<i>Sub-total</i>				\$2,573,620
Approvals, permits, applications, designs, specifications, engineering assessment of timber bridges (2.5% of maximum estimated expenditure - \$2,573,620).	%		2.5	\$64,340
Contingency amount (15% of maximum estimated expenditure - \$2,573,620).	%		15.0	\$386,040
Project management (5% of maximum estimated expenditure - \$2,573,620).	%		5.0	\$128,680
<i>Total (not incl GST)</i>				\$3,152,680

Note #: The trail construction costs noted in each of the tables above include an allowance for gravelling of the trail surface. An extra \$10-15 million would be required to seal the 213km trail (with bitumen/asphalt). (This is the equivalent of approximately \$18 - \$25/m². Actual rates will vary depending on competitiveness of contractors).

Table 16: Total Costs

Section	Cost
<i>Section 1: Queanbeyan to Michelago (49km)</i>	\$6,846,580
<i>Section 2: Michelago to Bredbo (30km)</i>	\$5,525,980
<i>Major Bridges between Michelago and Bredbo</i>	\$3,037,500
<i>Section 3: Bredbo to Cooma (36km)</i>	\$6,932,610
<i>Major Bridges between Bredbo and Cooma</i>	\$8,750,000
<i>Section 4: Cooma to Nimmitabel (38km)</i>	\$6,956,290
<i>Section 5: Nimmitabel to Jincumbilly (37km)</i>	\$6,616,740
<i>Section 6: Jincumbilly to Bombala (24km)</i>	\$3,152,680
Total (excluding GST)	\$47,818,380

Note: It is assumed that removal of steel track and sleepers and shaping of basic track by contractor will be at no cost to project (allowing for steel and sleepers to be salvageable commodities).

Fencing

It is assumed that fencing will be mandatory along those sections of the corridor that are not already fenced. As noted elsewhere, the railway south of Cooma to Bombala was originally built as a 'pioneer' line – i.e. without fencing or ballast.

It is acknowledged that fencing does now exist along some sections of the corridor south of Cooma (despite it being a railway developed without fencing). This fencing is not complete and those sections of fencing that do exist will have been erected along parts of the corridor boundary. Fencing will have been erected by adjoining landowners to either differentiate between land ownership parcels, to contain stock within boundaries or paddocks and to prevent stock from straying onto the railway tracks when trains were running.

New fencing has been costed along much of the corridor. The new fencing will be required in accordance with the proposition that the rail trail requires a narrower corridor (perhaps 6 – 8 metres wide) than the original 30 - 40 metre wide railway corridor. This new fencing along the narrower corridor allows the adjoining landowners to graze their stock within the 'unneeded' section of the publicly owned (former) railway corridor. Although the corridor is proposed to be fenced, these cost estimates allow for ample stock and machinery crossing points of the corridor to enable farmers and their stock to cross the (former and to-be-fenced) rail trail corridor without the necessity of opening and closing gates. The stock crossings will be open 24/7.

Notes

1. *Much of the corridor has only light regrowth and grasses have been controlled by stock grazing on the corridor.*
2. *Trail construction. Construction includes light rolling, covering with road base, levelling, trimming, shaping and compacting: \$60/lineal metre (for 2.5m trail width). Building lesser quality trails leads to significant maintenance bills in the future and also has the potential to deter users.*
3. *The trail construction costs noted in each of the tables above include an allowance for gravelling of the trail surface. An extra \$10-15 million would be required to seal the 213km trail (with bitumen/asphalt). (This is the equivalent of approximately \$18 - \$25/m². Actual rates will vary depending on competitiveness of contractors).*
4. *The recommendation is that fencing on the corridor will be built to allow for a 6 – 8 metre wide trail corridor and the remaining corridor (usually 22 metres on a 30 metre wide corridor and 32 metres on a 40 metre wide corridor) will be made available to adjoining landholders for grazing livestock. While this contributes to a high construction cost, it significantly reduces the maintenance burden meaning only a 6 – 8 metre corridor needs to be slashed by the trail manager. In most cases, new fencing will therefore be required. The costings reflect this.*
5. *An allowance has been made for slashing a bridle trail alongside main trail (if horses are to be permitted).*
6. *The estimates set out in the tables above are an indication only and have been based on conditions observed from many areas along the railway corridor and at a number of the most significant bridges. A more reliable estimate of costs can only be provided following a complete traverse of the corridor, as would be done in the preparation of a detailed trail development plan.*
7. *These broad estimates of probable costs are based on contractors' rates. Costs can be considerably reduced through use of in-kind contributions from the Council, use of volunteers for various tasks, use of prison crews (for construction tasks), etc.*
8. *The estimates of probable costs above are based on recent relevant construction costs from other trail projects. Real-life costs will depend on a number of factors, including the state of the economy, the extent of 'advertising' of construction tenders, the availability and competitiveness of contractors, the rise and fall in materials costs, the choice of materials used in construction and final design details. Tenders submitted by construction contractors may vary significantly from the estimated costs in the tables contained within this report.*
9. *Estimated costs are as at October 2019. An additional 3.5% should be added to each individual total per year compounded.*




SECTION 10 – THE BUSINESS CASE

10.1 Introduction

It is always difficult to predict the economic impact of a new trail. Visitor numbers on the Bibbulmun Track (in WA) grew from 10,000 when the new alignment was first opened in 1997 to 137,000 in 2004 (*Colmar Brunton 2004*) to over 167,000 in 2008 (*Colmar Brunton 2009*) to over 300,00 in 2015 (*Hughes et al 2015*). This was on a trail that had existed in its entirety for many years but was substantially altered and reopened in 1997 (although new sections of it had been opened prior to its grand opening). Visitors included those on ‘local trips’, day trips and overnight or longer stays (including those who travelled from end to end).

A dramatic increase in visitor numbers such as experienced by the Bibbulmun Track can be attributed to very good marketing of the track. The economic impact of the proposed trail is primarily dependent on the extent to which the trail is marketed and promoted. The Bibbulmun Track Foundation markets the trail, organises events and organises guided experiences of the track – its role in marketing and promotion has been critical to the track’s success.

A trail will bring additional tourists and keep them longer in the area. Other possible benefits from developing the trail include:

-  Improvements to community connectivity;
-  Increasing recreational options for local people; and
-  Creating opportunities to build on existing industries and enterprises of the area.

A trail such as proposed Monaro Rail Trail will have attraction to visitors – day trippers and overnight visitors. However, it will also add to the stock of existing trails for local people – people who live in towns and villages within easy reach of the trail. Some of these people will use the trail for exercise – these ‘back gate’ users may not be significant in terms of expenditure, but they are significant in terms of numbers as they would use the trail many times a year.

One of the key attractions of developing this rail trail is the opportunity to provide a rail trail experience for residents of NSW in NSW. The NSW State Government has previously indicated that one of the key outcomes it is seeking from tourism projects is to reduce the “leakage” of expenditure i.e. money being spent by NSW residents in other states (and countries) on holidays. This is in addition to attracting holiday makers from other States and countries. There is limited research data on this issue associated with rail trails. Beeton’s 2009 study of the Murray to the Mountains Rail Trail in North East Victoria showed that, of the 60,000 trail users/year, around 14% of them (8,400) were from NSW with a roughly even split between Sydney and Regional NSW (this was consistent with an earlier study of the same rail trail). These visitors were expending an average of \$332/day (in 2017 dollars). This is quite significant. The Queensland Government has committed to spending \$14 million developing rail trails over the next 3 years. The recently finished Brisbane Valley Rail Trail in Queensland is now the longest rail trail in Australia. Both of these developments have the potential to attract interstate visitors. Research for the New Zealand Government showed Australia is the biggest international market for cycle tourism in New Zealand, accounting for some 23% of

international cycle tourists. 15% of users on the Otago Central Rail Trail came from Australia (*Central Otago District Council 2015*). Anecdotal evidence suggests that many NSW residents interested in rail trails are heading to Victoria and New Zealand to have these experiences not currently on offer in NSW.

Many of these trail users will be interested in using a rail trail developed in NSW thus reducing the expenditure leakage.





Another key element is interstate and international visitation to the region. A trail such as the Monaro Rail Trail will also attract interstate visitors particularly from the ACT which is already providing a significant number of visitors to the region (some 22.5% of summer visitors and 12% of winter visitors).

10.2 Visitor Markets

Visitor trends and markets were discussed in detail in Section 7. Key trends and markets to be considered bear re-iteration.

10.2.1 General Visitor Trends

Tourism Research Australia and Destination NSW have undertaken research on a number of visitor markets relevant to rail trails. The most relevant general observation was that regional destinations offer key experiences for what Australians are seeking from their holidays.

-  The millennials age group seeks authentic and genuine travel experiences, together with a variety of active and passive ways to enjoy them. This could include nature-based experiences, as well as country food and wine (*Tourism Research Australia, 2017(a)*).
-  The over 55s is one of most powerful age groups in Australia in terms of financial capability and life expectancy is increasing. This group travels and prefers domestic travel to international travel. (*Destination NSW, May 2015*).
-  More people (over 55) are choosing to travel earlier than retirement to enjoy the more active or immersive experiences that destinations have to offer. This is one of the key demographics for rail trails.
-  Ease and convenience are the key drivers for domestic travel by families in Australia, and they are looking for destinations that are relaxed and easy with beautiful surroundings, preferably only a few hours' drive from home. (*Destination NSW, June 2015*).

10.2.2 General Visitor Numbers

The Snowy Mountains Tourist Region hosted 1,003,000 domestic overnight visitors and 603,000 domestic day trippers in 2018. 23,000 international visitors also came to the region (for a total of 1.629 million visitors).

10.3 Visiting Trail Users

There is no doubt from available evidence that recreation trails attract visitors who may come to a region specifically to do a trail. For example, in 2004, 50% of visitors to South Australia's

Riesling Trail came to the Clare Valley specifically to walk or ride the trail – the other 50% used the trail as a secondary activity to their trip to the Clare Valley.

A trail from Michelago to Bombala (wholly within the Snowy Mountains Region) has the potential to add extensively to the number of existing visitors. Many new users will be attracted to the region simply due to the trail's length and the landscapes through which it passes. Extending the trail north to Queanbeyan has the potential to attract more users and may also change the make-up of users (with many more people close to the trail).

The length of the shorter trail (at 165 kms) provides for a perfect 3 day bike ride (with an attractiveness for riding sections of it in 2 days), while the longer trail (at 213 kms) provides for a perfect 3-5 day ride. As a rail trail, the corridor is reasonably flat and will therefore accommodate the full range of cyclists, as well as walkers and other users.

10.3.1 Visiting Trail Users – Predicting User Numbers

What is a reasonable forecast for trail user numbers given some existing visitors will stay longer to experience the trail, and some will come to the region as new visitors simply to use the trail? Nature visitors who participate in the types of activities undertaken on tracks and trails provide a pointer to the market potential for a trail such as the proposed Monaro Rail Trail. Tourism Research Australia estimates that 51% of domestic overnight nature visitors take part in bushwalking / rainforest walks, whilst 39% of domestic day visitors and 37% of international visitors enjoy this type of activity. While the proposed trail does not necessarily provide a bushwalking experience, it does provide an opportunity for nature visitors.

Victoria attracted 320,000 cycle tourists (domestic and international) in 2010 (*Victoria's Cycle Tourism Action Plan 2011-2015*). A proportion of these would be interested in off-road cycle touring on a trail such as the Monaro Rail Trail.

10.3.1.1 Projected User Scenarios - Day Trip Usage

General Comments

Any trail has the potential to add to the number of day trippers – a significant market for a rail trail.

The Mundaring Shire trail network (in WA) is just under 1 hour from the Perth CBD. In the Mundaring case, 180,000 visitors (from outside the Shire) make over 900,000 visits/year (an average of 5 visits/person). The majority of these visitors come from Greater Perth (a population of 1.5 million at that time) and are day trippers. Some 12% of Perth residents visit the trail network.

Market Equity's research in South Australia shows that a significant percentage of cyclists on surveyed trails are more prepared than walkers to travel to use a trail (36% of cyclists interviewed on the five trails were non-locals) (*Market Equity 2004*).

The Lilydale Warburton Rail Trail provides a reasonable 'shadow' market for making some estimates. The trail attracts a large number of day trippers, with 100,000 of the 105,000 annual visitors being day trippers (some 3% of the day tripper market to the Yarra Valley and Ranges). The trailhead at Lilydale is 40 minutes by car from Central Melbourne and an hour by train. It is very well positioned for day trippers. The Trail is in an established tourism area – the Yarra Valley and Ranges – with a wide range of tourist infrastructure and attractions. In 2013, the Yarra Valley and Ranges region attracted 663,000 domestic overnight visitors and 3.1 million

day trippers. The Yarra Valley and Ranges are very attractive natural environments, another positive factor attracting trail users.

Expenditure is also quite significant. Day tripper expenditure (based on a number of studies) is \$147.87/day with \$47.32 (or 32%) of this spent on food and beverage – most of which is likely to be spent in the region.

The calculations below assume that 2 hours is a reasonable distance for people to travel (each way) to undertake a day trip. Cyclists in particular (likely to be the major user group) would take 2-3 hours to traverse any of the 6 sections (including Queanbeyan-Michelago) travelling at a modest 15km/hr. Allowing time for a car shuffle, any one section of the rail trail is a good day trip if the user is within 2 hrs of any part of the trail.

Monaro Rail Trail (Michelago to Bombala)

The trail end points (Michelago and Bombala) are within 2 hrs of the Canberra-Queanbeyan metropolitan area (with a population of almost 460,000). Other major towns in the Capital Country region (such as Goulburn and Yass - a combined population of almost 40,000) are also within 2 hours of the northern end of the trail. As noted in Section 7, Canberra's population has a much higher propensity for cycling than other Australian states, so Canberra is likely to be a major day trip market for the trail.

A trail developed along the old railway corridor between Michelago and Bombala may attract in the order of 25,000 additional day trippers/year (specifically to use the trail). This number represents:

- ✚ Around 4% of the existing day tripper market to the Snowy Mountains region; and
- ✚ Around 5% of the population within 2 hours of the trail.

Increasing day trippers to the region by 25,000/year will result in an injection of some \$3,696,750 into the local economies per year (based on the average figures of \$147.87).

It is reasonable to assume – given the proximity of Canberra and the popularity of cycling (and outdoor recreation more generally) for its residents – that over 50% of day trippers are likely to come from the ACT.

Monaro Rail Trail (Queanbeyan to Bombala)

Extending the trail to Queanbeyan adds marginally more people to the 2-hour catchment (mostly from further north towards Sydney and to the NSW South Coast) but is unlikely to add significant additional trail users.

The extension may change use patterns. Residents of the Tuggeranong sub-region would be within 20 minutes of Royalla siding and residents of Canberra's eastern suburbs are within 20 minutes of Queanbeyan – both logical starting points (local users are discussed in Section 10.4). Consequently, there may be a loss in day trip numbers as some people in the ACT may in fact become “local users” rather than day trippers. However, given the extensive cycling network in Canberra, many rail trail users within close proximity are more likely to go for a short “exercise” ride on the existing network rather than put a bicycle in the back of their car and head out to Royalla or Queanbeyan after work.

It is reasonable to conclude that the longer rail trail would increase the number of people converting a day trip to an overnight trip by only a small margin compared to the shorter trail. Adding 1,000 day trippers would mean the entire rail trail would attract 26,000 visitors

injecting \$3,844,620 /year into the economy (note that the longer rail trail would only attract an additional 1,000 people in this category).

10.3.1.2 Projected User Scenarios - Converting Day Trips to Overnight Trips

General Comments

Trail development may also turn day trippers into overnight trippers with consequent rise in economic benefits. The trail provides an additional activity for visitors – an overnight stay will give visitors time to walk or ride the trail in addition to their other activities. Overnight visitors to trails are spending an average of \$213.03/person/day (as discussed in Section 7.12).

Monaro Rail Trail (Michelago to Bombala)

The likely scenario would be that some visitors to the region will turn day trips into overnight stays if a trail is provided as an additional activity.

If the trail converted 2,000 day trippers into overnight visitors, this would inject an additional \$426,060/year into the economy based on overnight visitor expenditure of \$213.03/day. If they stay overnight to undertake the trail journey, they would undertake other activities as well over the course of their stay. The benefit of the 2nd or subsequent day's stay cannot be attributed to the trail.

This number represents around 0.2% of the existing overnight visitor market to the entire region. Given the nature of this trail, the key market will be those who come specifically for the trail rather than those who add it to an existing stay in the region (other shorter rail trails tend to be an “add-on” to existing activities).

Monaro Rail Trail (Queanbeyan to Bombala)

People may stay longer to do more of the rail trail though given they are unlikely to ride all of it in the extra day, this effect may be quite small. It is reasonable to conclude that the longer rail trail would increase the number of people converting a day trip to an overnight trip by only a small margin compared to the shorter trail i.e. an additional 2,500 visitors injecting \$532,575/year into the economy (note that the longer rail trail would only attract an additional 500 people in this category).

This number represents around 0.25% of the existing overnight visitor market to the region. Some of these visitors are likely to be people who are not traditional rail trail users but who would be interested in using the trail simply to visit the key attractive bridges over the Numeralla River and the Bredbo River.

10.3.1.3 Projected User Scenarios - Encouraging Existing Overnight Visitors to Stay Longer

General Comments

An additional facility will encourage visitors to extend their stay to allow an extra day to use the trail. The trail could be included in a package of outdoor recreation opportunities and this is likely to attract users. A trail would be a good inclusion in a package with other tourist attractions. Such a package makes an appealing weekend away or an incentive to stay a day or two longer.

Good marketing of such a package would mean that overnight stays in the region would increase accordingly. This has a significant impact on economic benefits, as people who stay overnight spend considerably more than those who come for a day only.

Monaro Rail Trail (Michelago to Bombala)

If 2,000 visitors stay an extra day to use the trail, this would inject an additional \$426,060/year into the economy based on overnight visitor expenditure of \$213.03/day. Additional expenditure as a result of their overnight stay – primarily but not only accommodation – can be attributed to the trail. This number represents around 0.2% of the existing overnight visitor market to the region. As with “converted” day trippers, some of these visitors are likely to be people who are not traditional rail trail users but who would be interested in using the trail simply to visit the significant rail trail bridges.

Monaro Rail Trail (Queanbeyan to Bombala)

It is reasonable to conclude that the longer rail trail would increase the number of people converting a day trip to an overnight trip by only a small margin compared to the shorter trail i.e. an additional 2,500 visitors injecting \$532,575/year into the economy (note that the longer rail trail only attracts an additional 500 people in this category).

This number represents around 0.25% of the existing overnight visitor market to the region. Some of these visitors are likely to be people who are not traditional rail trail users but who would be interested in using the trail simply to visit the key attractive bridges over the Numeralla River and the Bredbo River.

10.3.1.4 Projected User Scenarios - Attracting New Overnight Visitors

General Comments

The Monaro Rail Trail (whichever of the two options is developed) will be the longest rail trail in Australia in one of the most scenic regions. It has the potential to become an iconic trail and those advocating for it are not mistaken in arguing that it could be similar to New Zealand’s Otago Central Rail Trail which attracts people to the South Island of New Zealand primarily (and sometimes only) to undertake a 3-5 day journey along it.

This is a growing area of trails marketing, where regions are looking to have either a longer trail (a trail that can be traversed in 2-3 days such as the Otago Central Rail Trail) or a cluster of shorter trails that make an overnight or longer visit to a region very attractive. The Monaro Rail Trail falls into the former category, providing an attraction that will motivate visitors to come to the region primarily for the trail (they may undertake other activities while in the region). It is unlikely that someone would drive or fly from Sydney or Melbourne (or elsewhere) primarily to undertake a short 1 day trail journey.

There are a limited number of “long” rail trails currently in Australia. The recently completed Brisbane Valley Rail Trail (Queensland) is the longest rail trail at 161 kilometres long. The Great Victorian Rail Trail is 134 kms long. The Murray to the Mountains Rail Trail (Victoria) is 116 kilometres. Victoria has another 6 rail trails between 50 and 100 kilometres long. The Murray to the Mountains is probably the most successful of the long trails with 60,000 users/year. Trail users make a weekend (or longer) trip on the trail.

The success of the Otago Central Rail Trail (a distance of 150 kilometres) in attracting between 12,000 and 14,000 users per year to traverse its entire length (a larger number traverse shorter lengths of the trail) further highlights the appeal of the long rail trail. The rise in use of other long trails (not rail trails) in recent years points to an increasing demand for this type of trail experience. User numbers on the Bibbulmun Track (WA), the Munda Biddi Trail (WA), the Pilgrims Way or Camino de Santiago (Spain and France), and the Kokoda Track (PNG) have

increased quite markedly in recent years. They offer different sorts of experiences, but they are all long trails (with options to do short sections – with the exception of the Kokoda Track). Many of the longer trails offer supported and guided experiences opening up trails to people who may previously have not considered doing a trail activity. The advent of e-bikes with their capacity to travel much further in a day is likely to increase the demand for long trails.

The trail is likely to attract users for the primary purpose of riding (or walking) the trail offering a 3 - 5 day ride depending on the pace of the journey and the length of the trail and a longer walk of 8 – 10 days – whether its northern terminus is Queanbeyan or Michelago.

Monaro Rail Trail (Michelago to Bombala)

Given the numbers of users on other trails, it is reasonable to estimate that a new long rail trail highlighting the Monaro region is likely to attract 20,000 new overnight visitors for the sole (or primary) purpose of cycling or walking the trail from Michelago to Bombala. The rail trail's proximity to the major population centres of Sydney, Melbourne and Canberra will be a major attraction. This number (20,000) represents 2% of the existing overnight visitor market to the region.

The length of time taken to traverse the trail will vary between user groups and the choice of journey length. All the expenditure of these trail users can be attributed to the trail; if there was no trail these users would not come.

For the purposes of this analysis, the simplest way to calculate likely expenditures is to provide an average use time, noting that some users will take a shorter time and some will take a longer time. The best comparative data available is survey work done on the Otago Central Rail Trail over 3 time periods – 2008, 2011 and 2014/15. The trail is 150 km long so is very similar to the length that the Monaro (Michelago to Bombala) Rail Trail would be. In the 2014/15 survey and the 2011 survey, the average time spent on the rail trail was 3.5 days (the 2008 survey showed users spending 3.8 days on the rail trail).

Attracting 20,000 new visitors to a rail trail connecting Michelago to Bombala using the trail for an average of 3.5 days would be an injection of \$14,912,100 into the regional economy (at an average daily expenditure of \$213.03).

Monaro Rail Trail (Queanbeyan to Bombala)

To calculate the additional economic activity of extending the trail to Queanbeyan is not a simple task. The trail terminus would be marginally closer to Sydney which may increase its attractiveness and could easily be accessed by train which may add to its attractiveness. Constructing the trail to Queanbeyan would add 49 km to the trail length. Extending the trail to Queanbeyan could result in an additional 5,000 people using the trail (meaning a total of 25,000 would use a trail from Queanbeyan to Michelago). Extending the trail would mean 5,000 additional users taking an extra day on the trail – it is assumed users would spend on average 4.5 days on the longer trail. The resulting injection of money into the regional economy is estimated to be \$4,793,175 (5,000 users x \$213.03/day x 4.5 days).

It is possible that the extension of the trail to Queanbeyan will result in the 25,000 users all taking an average of 4.5 days to do the entire trail – for the purposes of this analysis, a more conservative forecast is adopted with only the additional 5,000 users taking 4.5 days (to do more of the trail).

In summary, possible visitor numbers are shown in Tables 17 and 18. The tables are not mutually exclusive i.e. the numbers in Table 18 include the numbers in Table 17 plus additional users attracted by the extended trail.

**Table 17: Monaro (Michelago to Bombala) Rail Trail
Possible Visitor Numbers and Associated Expenditure: A Summary**

Category	Predicted visitor numbers/year	Predicted expenditure/year
New day trippers	25,000	\$3,696,750
Day trippers converting to overnight stays	2,000	\$426,060
Overnight stays being extended by a day to use the trail	2,000	\$426,060
Attracting new overnight visitors	20,000	\$14,912,100 (assumes an average time on the trail of 3.5 days)
Total visitor numbers	49,000	\$19,460,970

**Table 18: Monaro (Queanbeyan to Bombala) Rail Trail
Possible Visitor Numbers and Associated Expenditure: A Summary**

Category	Predicted visitor numbers/year	Predicted expenditure/year
New day trippers	26,000	\$3,844,620
Day trippers converting to overnight stays	2,500	\$432,325
Overnight stays being extended by a day to use the trail	2,500	\$432,325
Attracting new overnight visitors	25,000	\$19,705,275 (assumes an average time on trail of 3.5 days as above and 4.5 days for the additional 5,000 users attracted by the extension)
Total visitor numbers	56,000	\$24,414,545

How do these figures compare to what is happening on other trails in Australia? Research figures are limited and tend to focus on iconic trails – the Bibbulmun Track (300,000/yr) and the Munda Biddi Trail (21,000/yr) in Western Australia, and the Great Ocean Walk (100,000/yr) and the Wilsons Promontory Walk (60,000/yr) in Victoria.

Other less iconic trails also provide available research:

- Recent trail counters on South Australia's Riesling Trail show that over 40,000 people passed through 4 trail counters each year. While this does not necessarily translate to 40,000 users (as many would pass more than one counter), it suggests significant number of users. This trail is 2 hrs from Adelaide in the renowned tourist area of the Clare Valley (with very limited local population).
- Over 23,000 users passed through counters on the Old Beechy Rail Trail (Victoria) in 2013. Again, this does not necessarily translate as over 23,000 users, but it gives an indication of use rates.
- Around 27,500 users passed through counters on the Great Victorian Rail Trail in the first quarter (January-March) of 2014. Again, this does not necessarily translate as 27,500 users, but it gives an indication of use rates.

The principal comparison can however be made with the Otago Central Rail Trail given similarities in length and landscapes. Across 3 surveys (2008, 2011, 2014/15), the number of users traversing the complete rail trail (150 kms) has varied between 12,000 and 14,000. In addition, 24,000 users have used sections of the trail. This is the likely use pattern of the Monaro Rail Trail (the shorter or longer version). The Otago Central Rail Trail attracts 61% of its users from within New Zealand, which has a total population of just under 5 million people. Accessing the trail is not simple but flights from New Zealand's two major centres of Auckland and Wellington (the North Island is the source of 40% of trail users) to Christchurch (the trail's major city access point) are 1 hr 25 mins and 1 hour respectively. Driving is more difficult from either of these centres. By comparison, Sydney and Melbourne have a combined population of over 10 million people and are within a 1 hr flight of Canberra – the proposed trail's major access point. In addition, driving from either of these cities is relatively simple. Sydney to Canberra is a 3 hour drive (and an additional 1 hr to Michelago) while Melbourne is a 6.5 hr drive to Bombala (passing several rail trails along the way which could be packaged together as a long holiday experience). In addition, Canberra/Queanbeyan with a population of almost 460,000 is on the trail's doorstep.

The Murray to the Mountains Rail Trail in Victoria presents similar logistics – Beechworth (one of the key starting points) is 3 hours from Melbourne, 4 hours from Canberra and 6 hours from Sydney. This trail attracts 60,000 users per year – around 10% of whom are assumed to be local residents.

Given the numbers of people using these two similar trails in particular, estimates as outlined in Tables 15 and 16 are reasonable and supported by other similar existing trails.

There may be additional people who use the trail as part of their visit to the region. While they add to the total number of trail users, their expenditure cannot be counted in any economic analysis of the trail's benefit as the presence of the trail is not the primary attraction for these visitors. As noted above, 50% of visitors to South Australia's Riesling Trail came to the Clare Valley specifically to walk or ride the trail – the other 50% used the trail as a secondary activity to their trip to the Clare Valley. The economic contribution of the latter 50% is not counted as an economic benefit of the trail.

The predicted user numbers represent a likely outcome once the trail is established. As noted above, marketing and promotion of the trail will be a key element in realising these numbers – users just don't magically appear once a trail is built. Such marketing and promotion require the commitment of resources – human and financial. Use will build over time – even with good

marketing and promotion. The available evidence is limited and tends to show that trail use starts slowly but grows very quickly at some point - the Bibbulmun Track for example grew from 10,000 in 1997 to 137,000 in 2003 to 167,000 in 2007 to over 300,000 in 2015.

10.4 Local Trail Users




Every regional trail is a local trail. Therefore, it is important not to overlook the contribution of local residents to the success of a trail. In 2001, the Mundaring Shire trail network was used by over 200,000 people (*Jessop and Bruce 2001*), having grown from a low base when the network was first fully opened. Only 10% of these users were locals (residents of Mundaring Shire) with many other users drawn from the Perth metropolitan area. The total annual visits (people generally use trails more than once a year) were a staggering 2.454 million visits annually, with local residents accounting for 63% of these visits. The average number of trips per year per local resident was 75 (compared to the 5-20 trips used in the following forecasts). It is difficult to know how far people will travel to take advantage of a local recreation facility. 20 minutes travel is a reasonable figure to estimate the “local catchment” of a trail.

10.4.1 Local Trail Users – Predicting User Numbers

10.4.1.1 Monaro Rail Trail (Michelago to Bombala)

There are five towns and villages within 20 minutes of the Rail Trail if it finishes at Michelago. These are Michelago, Bredbo, Cooma, Nimmitabel and Bombala. The combined population of these areas is of the order of 9,300.

Three possible scenarios can be used in calculating likely local user numbers. These are:

-  A low/low scenario - 5% of the combined population within 20 minutes of the trail making 5 visits/year to the trail.
-  A medium/medium scenario - 10% of the combined population making 10 visits/year to the trail.
-  A high/high scenario - 20% of the combined population making 20 visits/year to the trail.

The next step is to estimate total trip numbers. In the Mundaring study, the average number of trips per year per local resident was 75. Table 19 provides three visitation scenarios taking a far more conservative approach compared to the actual visitation rate coming from the Mundaring study.

Table 19: Monaro (Michelago to Bombala) Rail Trail Potential Annual Visits by residents
(Population of the five towns and villages within close proximity to the trail – 9,300)

Category	Low trail usage: 5% of residents	Medium trail usage: 10% of residents	High trail usage: 20% of residents
Low (5 visits/yr)	2,325	4,650	9,300
Medium (10 visits/yr)	4,650	9,300	18,600
High (20 visits/yr)	9,300	18,600	37,200

Local users also spend money while using trails. Expenditure per trip by local residents is always lower than for visitors, as locals are closer to home and more likely to either take all that they need or come home to eat and drink following a trail visit. The expenditure figures from the Mundaring study (\$1.44/person/trip in the Shire – mainly food and drink) are a legitimate base to work from (and have been converted to 2018 dollars - \$2.19/person/trip).

Using this figure in combination with visitation scenarios generated in Table 19 gives a range of expenditure estimates. Table 20 shows a simplified set of three scenarios: low usage / low number of trips, medium usage / medium number of trips, and high usage / high number of trips.

Table 20: Potential Total annual expenditure in the vicinity of the trail by residents
(low, medium and high refer to the use rates developed in Table 19 above)

Use Scenario	# of person visits	Total spent (\$)
Low/low	2,325	\$5,090
Medium/medium	9,300	\$20,365
High/high	37,200	\$81,470

What is the likely scenario for local trail users? The Mundaring figures show 63% of the local population making an average of 75 trips/year.

Given these figures, it would seem the low/low scenario of 2,325 person visits/year (i.e. 5% of the 'local' population using the trail for 5 visits per year) is a reasonable, if very conservative, scenario to adopt (conservative when compared with the Mundaring data). Such visitor numbers would inject **\$5,090/year** into the local economy. Due to the small local population, direct economic benefits flowing from local trail use will be relatively low.

10.4.1.2 Monaro Rail Trail (Queanbeyan to Bombala)

Extending the trail to Queanbeyan will significantly change the number of potential "back gate" or local users. Residents of the Tuggeranong sub-region would be within 20 minutes of Royalla siding and residents of Canberra's eastern suburbs are within 20 minutes of Queanbeyan – both logical starting points. According to the 2018 ABS Region data summary, these two

regions are home to over 115,000 people. Within 20 minutes of Queanbeyan station (within Queanbeyan), there are almost 46,000 people. Queanbeyan West, Jerrabomberra and the new subdivision of Jerrabomberra West/Tralee would be right on the rail trail.

What are reasonable numbers for local users given the catchment within 20 minutes is 161,000. As noted above (Section 10.3.1.1), there may be a loss in day trip numbers as people in the ACT may in fact become “local users” rather than day trippers. However, given the extensive cycling network in Canberra, many Canberra -based rail trail users within close proximity are more likely to go for a short “exercise” ride on the existing network rather than put a bicycle in the back of their car and head out to Royalla or Queanbeyan after work or school. They are more likely to make this a day trip. The absence of an extensive bike network in Queanbeyan may attract users on to the rail trail for short rides. The following analysis is based on only attracting people from the Queanbeyan area as local users.

Table 21 provides three visitation scenarios taking a far more conservative approach compared to the actual visitation rate coming from the Mundaring study.

Table 21: Monaro (Queanbeyan to Bombala) Rail Trail Potential Annual Visits by residents (Population of the towns and villages within close proximity to the trail (excluding Canberra) – 55,290)

Category	Low trail usage: 5% of residents	Medium trail usage: 10% of residents	High trail usage: 20% of residents
Low (5 visits/yr)	13,820	27,645	55,290
Medium (10 visits/yr)	27,645	55,290	110,580
High (20 visits/yr)	55,290	110,580	221,160

Using the relevant expenditure figure in combination with visitation scenarios generated in Table 21 gives a range of expenditure estimates. Table 22 shows a simplified set of three scenarios: low usage / low number of trips, medium usage / medium number of trips, and high usage / high number of trips.

Table 22: Potential Total annual expenditure in the vicinity of the trail by residents (low, medium and high refer to the use rates developed in Table 21 above)

Use Scenario	# of person visits	Total spent (\$)
Low/low	13,820	\$30,265
Medium/medium	55,290	\$121,085
High/high	221,160	\$484,340

What is the likely scenario for local trail users? The low/low scenario (5% of the population within the 20-minute catchment visiting 5 times/year) would yield 13,820 local users. Such a

scenario would mean that local users would constitute almost 20% of trail use – a realistic scenario.

Such a scenario (i.e. 5% of the ‘local’ population using the trail for 5 visits per year) is a reasonable, if very conservative, scenario to adopt (conservative when compared with the Mundaring data). Such visitor numbers would inject **\$30,265/year** into the local economy. Local user numbers will grow as the population grows – Tralee had 15 people at the 2016 Census but is forecast to have almost 6,000 people by 2036.

10.4.2 Local Trail Users – How Long Will They Spend on a Trail






The evidence is that most trail users spend up to 4 hours on a trail (walking or cycling). However, local people using the trail as part of an exercise regime are likely to have different time use patterns. The most recent national *Exercise, Recreation and Sport Survey (2010)* shows that those who regularly exercise do so for between 2 and 5 hours/week and the median number of exercise “events” was 1.6 times/week. It is reasonable to assume (for the purposes of calculating potential hours of exercise on the trail) that each use will be for 1 hour.

Using this assumption and combining it with the forecast user numbers, it is likely that there will be between 2,325 and 13,820 additional hours of additional physical activity in the local communities who can access the Monaro Rail Trail.

10.5 Projected User Scenarios - Summary

With the right marketing, the trail will attract local users, day trippers and visitors. Under a relatively conservative scenario, the following outcomes are achievable.

Monaro Rail Trail (Michelago to Bombala)

-  Local use – 2,325 local users/year is a reasonable expectation. This will result in an economic injection of \$5,090/year;
-  Expansion of the existing day tripper market to the region. 25,000 new day trippers/year would inject \$3,696,750/year into the regional economy.
-  With a new significant recreation attraction, some day-trippers may stay overnight, generating a new income stream. If the trail converted 2,000 day trippers into overnight visitors, this would inject an additional \$426,060/year into the regional economy.
-  If 2,000 visitors stay an extra day to use the trail, an additional \$426,060/year would be injected into the regional economy.
-  If 20,000 new visitors come to the region solely (or primarily) to do the trail, an additional \$14,912,100/year would be injected into the regional economy.

The total injection of dollars into the local economies from local, day trip and overnight visitors may be of the order of **\$19,466,060/ year** (under a range of conservative scenarios) from **51,325** users.

Complex economic analysis (beyond the scope of this project) is needed to determine how many jobs are likely to be created by such expenditure.

Monaro Rail Trail (Queanbeyan to Bombala)

- ✚ Local use – 13,820 local users/year is a reasonable expectation. This will result in an economic injection of \$30,265/year;
- ✚ Expansion of the existing day tripper market to the region. 26,000 new day trippers/year would inject \$3,844,620/year into the regional economy.
- ✚ With a new significant recreation attraction, some day-trippers may stay overnight, generating a new income stream. If the trail converted 2,500 day trippers into overnight visitors, this would inject an additional \$432,325/year into the regional economy.
- ✚ If 2,500 visitors stay an extra day to use the trail, an additional \$432,325/year would be injected into the regional economy.
- ✚ If 25,000 new visitors come to the region solely (or primarily) to do the trail, an additional \$19,705,275/year would be injected into the regional economy.

The total injection of dollars into the local economies from local, day trip and overnight visitors may be of the order of **\$24,444,810/ year** (under a range of conservative scenarios) from **69,820** users.

Complex economic analysis (beyond the scope of this project) is needed to determine how many jobs are likely to be created by such expenditure.

It should be emphasised that user and visitor numbers will not necessarily be realised in the first years of operation if the trail proceeds. It also should be noted that these numbers may grow as the overall visitor numbers grow.

10.6 Business Benefits

The completion of a trail would not simply provide an injection of funds to stabilise and grow existing and new businesses (as discussed in Section 7). The psychological impact on businesses can also be very important. Work done for the Riesling Trail included some qualitative research using focus groups consisting of business operators (*Market Equity 2004*). The key responses included:

- ✚ A belief amongst business providers that the trail contributes to economic activity in the region.
- ✚ The trail is seen to attract a variety of visitor types to the region, with wine as well as non-wine interests.
- ✚ The trail is seen as highly important to businesses in the area. Businesses were passionate about the trail and believed it contributed to their businesses as well as helping to position the area as an authentic leisure holiday destination. The exact impact in measurable terms could not be clearly ascertained, as it is so intrinsically linked to businesses in the region, but there was a definite opinion that the Clare Valley would not be the same without the trail and that it had contributed to business formation as well as business growth.

Trail development offers a range of new business opportunities and the opportunity for existing businesses to extend their offerings.

It should also be noted that the trail construction process itself will provide an economic input to the region. The size of this benefit is beyond the scope of this report, but it can be quite significant.

10.7 Non-economic Benefits

There are a range of non-economic benefits accruing to local and wider communities from trail construction and use.

10.7.1 Health Related Economic Benefits to the Wider Economy

- ✚ Data from the USA indicates that every \$1 of funds spent on recreational trails yield direct medical benefits of \$2.94 (*Wang et al 2005*).
- ✚ The trail will encourage people to exercise – the economic benefit to society of getting an inactive person to walk or cycle is between \$5,000 and \$7,000/year. The economic benefit to society of getting an active person to walk or cycle is between \$850 and \$2,550/year (*Institute of Transport Economics 2002*). Increasing recreational options for local communities will aid overall community wellbeing.
- ✚ Participation in trail activities can improve physical and mental health, assisting with disease prevention particularly cardiovascular, musculoskeletal, respiratory, nervous and endocrine systems as well as reducing obesity, hypertension, depression and anxiety. The obesity epidemic alone is now estimated to cost Australia \$1.3 billion/year (*Australian Bicycle Council*). One heart attack is estimated to cost in the vicinity of \$400,000 in direct and indirect costs.

10.7.2 Quantifiable Benefits to Individual Residents

There are a number of benefits that accrue to residents of the region from a trail development over and above those that accrue to the regional economy (and therefore a select number of people) and to the wider economy (health benefits in particular).

- ✚ Medical research has shown that 1 hour of moderate exercise can add more than 1 extra hour of high-quality life to an individual.
- ✚ Cycling and walking as recreation activities can be cheaper than alternative forms of exercise such as gym classes. Yearly memberships to gyms are around \$600 in many instances – the cost of a good hybrid bike, which has a life of more than one year.

10.7.3 Non-quantifiable Benefits to the Community and to Individuals

There are a number of unquantifiable benefits to individuals and the community. These are listed here so that a complete picture of benefits can be considered when weighed up against project costs. It is difficult to cost them for a range of reasons.

10.7.3.1 Health and Wellbeing

Rail trails are an accessible form of recreation. Trail-based recreation is generally free, self-directed and available to all people, all day, every day. Good quality, accessible trails encourage physical activity and improved health. Increasing recreational options for local communities will aid overall community wellbeing.

Physical activity has also been shown to improve mental health and help relieve stress. The economic cost of mental illness is high in Australia - estimated to be approximately \$20 billion per year.

People can use trails in a variety of ways, depending on their abilities and preferences. Physical health benefits are discussed above. Social health benefits include:

- ✚ Trail activities facilitate participation and social interaction between a diversity of community members, age groups, individuals and families e.g. community walking groups, voluntary trail maintenance and conservation work;
- ✚ Market Equity (2004), in its report on trails in South Australia, found that using trails to get a sense of well-being (95% of survey respondents) and using trails as a means to unwind and relax (91% of respondents) were the two main drivers getting people out on recreation trails. The psychological health benefits of trails remain under-estimated;
- ✚ Trails can offer a wide range of opportunities to a diverse group of people. Depending upon design, trails can accommodate the elderly, people with disabilities or satisfy those seeking challenging adventures and a sense of achievement;
- ✚ Participation in trail activities has a relatively low cost to participants;
- ✚ Trails can introduce participants to other recreational and participation offerings in the community; and
- ✚ Trails help to connect people and places and to develop community pride.

A recent media report (<https://www.canberratimes.com.au/story/6192225/canberra-doctors-could-prescribe-patients-time-outside/>) promoted the idea of “green scripts”. The article suggests that, the ACT Government is working with the medical profession to determine the outcomes of a doctor “ordering” a patient to spend time outdoors with an ACT park ranger. So-called “green scripts” could be a new way to treat heart disease, high blood pressure, obesity and mental health issues. A representative of the ACT Government is quoted as saying that green scripts had been a hit in New Zealand. He also noted that, in the United States, the Golden Gate National Parks Conservancy in San Francisco had been running its similar “Park Rx” programme for 10 years.

10.7.3.2 Liveability

Quality recreational facilities, such as trail networks, can help create attractive places to live and visit. This was identified by a number of planning documents as a goal for the region (as discussed in section 4) and as a way of attracting new industries particularly to towns such as Bombala. Walking and cycling are relatively cheap modes of transport. Trails also provide a low impact means of travelling through the landscapes and play an important role in connecting people with nature.

Extending the trail to Queanbeyan also offers the opportunity to make the rail trail part of the active transport network within Queanbeyan. The rail trail would offer off-road opportunities for residents of Jerrabomberra, the new subdivision at Tralee and in Queanbeyan West to get to work and undertake other activities in Queanbeyan (or heading the other way to Hume). It also provides an off-road opportunity for these users to access the Canberra bike network to travel to Fyshwick and other eastern Canberra workplaces.

Local users of the trail will enjoy social interaction within the community and with greater social interaction, the social capital of the area may be boosted. There are a number of benefits

of enhanced social capital. It improves the capacity for people to trust others (*ABS 2012 cited in SGS 2013*). This strengthens the social cohesion in a community as it provides the opportunity for socially isolated individuals to integrate into the community. Greater social capital also facilitates networking, thus creating more efficient economic networks.

Trail projects help build partnerships among private companies, landowners, and local government. Each trail contains elements of local character and regional influence, and reflects the hard work, enthusiasm, and commitment of individuals, organisations and elected officials. In addition, when residents are encouraged to become involved in a trail project, they feel more connected to the community (*Warren 1998 cited in SGS 2013*).

10.7.3.3 Education






Trails present a unique opportunity for education. People of all ages can learn more about nature, culture or history along trails. Of particular importance, trails provide firsthand experience that educate users about the importance of the natural environment and respect for nature by leading users into a natural classroom. An added advantage of a rail trail is that it provides an opportunity for city to connect to country, in a way “bush” trails do not. Education of users about railway history is also a paramount consideration in trail development.

Enhanced, active education along trails is achieved through the use of comprehensive trail guides and signage to encourage awareness of the natural, cultural and historical attributes of the trail.

Trails have the power to connect users to their heritage by preserving historic places and by providing access to them. They can give people a sense of place and an understanding of the enormity of past events.

10.7.3.4 Environmental and Cultural Benefits

Trails provide a number of environmental and cultural benefits. These include:

-  Opportunities for the community to experience natural and cultural environments;
-  Protection of the adjacent environments by localising impacts and facilitating management of visitation effects;
-  Educational and interpretive opportunities and increased environmental and cultural awareness and appreciation;
-  Increased community ownership which helps to preserve natural and cultural values; and
-  Opportunities for community participation in conservation and revegetation work.





10.8 Summary

The Monaro Rail Trail will provide a number of benefits to residents and businesses of the region. Some of these are quantifiable.

Increased visitor numbers in the order of 49,000 to 56,000 visitors will inject between \$14,907,000 million and \$19,675,000/year into the region’s economy. Local use rates of between 2,325 and 13,820 people/year will see the injection of between \$5,090 and \$30,625/year. These figures represent an injection of money into the local economy, which will

ensure that the construction investment and ongoing maintenance costs are “paid off” over time.

The proposed trail offers a range of other significant benefits to these communities that cannot be quantified but are equally important to consider when assessing the project’s merits. These are:

-  The trail offers the opportunity for existing businesses to extend their offerings. The trail has the potential to improve the sustainability of businesses reliant on tourism.
-  The trail will encourage visitors to stay a little longer when visiting the region by offering another activity.
-  Increasing recreational options for local communities will aid overall community wellbeing, and in the long-term reduce health costs (a saving to the State Government).
-  A trail will provide firsthand experience that educate users about the importance of the natural environment and respect for nature by leading users into a natural classroom and connect the city to the bush.

In economic analysis, it is important to consider the opportunity cost of investment – the cost (foregone opportunity) of money invested in one project rather than in another. Much of the money that will be spent on this project, should it proceed, is likely to be sourced from specific grants for tourism and/or recreation projects. It will not be available for other types of projects – there is, in a sense, limited opportunity cost for funds, though funds for this project could be spent on similar projects elsewhere with a different set of costs and benefits.

SECTION 11 - FEASIBILITY STATEMENT

11.1 The Statement

In order to establish whether the proposed rail trail between Queanbeyan and Bombala (or Michelago and Bombala) is a feasible proposition, this Feasibility Study sought to answer several questions:

Is there a viable trail route? Yes. As is the case for the vast majority of disused railways in NSW, the entire corridor is still in public ownership. Although the southern section (between Cooma and Bombala) was developed as an unfenced railway, and many adjoining landowners have had unrestricted access to the public land within the corridor for many decades, the land remains in public ownership. It is also highly unlikely that the publicly owned land will be sold for an alternative use.

Some adjoining landowners have erected fences alongside, and across, the corridor over the years and stock have had unlimited access to much of the corridor for grazing purposes. There will inevitably be disruptions to long established farming practices should the proposed rail trail be constructed.

However, as is the case with many other successful rail trails developed in similar broadacre farming areas in Australia and overseas, there is a range of practical and viable solutions to each and every issue that adjoining landowners raise. The fact that some farms straddle the railway corridor should therefore not be considered as a reason for not proceeding with the development of a trail.

Although some bridges over roads have been dismantled, and at-grade crossings of the Monaro Highway have been removed, these minor discontinuities can easily be overcome through design solutions.

Are there alternative uses for the corridor that will provide more value to the community? Are these alternative uses viable? The realistic answer is **No**.

At the time of writing this rail trail Feasibility Study, other consultants have been preparing a Feasibility Study into the possibility of a freight/passenger railway being returned between Queanbeyan and Bombala (with an extension to Eden on the coast). Few people who attended the Open Communities believe it to be feasible and suggested the projected billions of dollars it would cost in rebuilding the line (including bridges, grade-separated road crossings and possible land resumption) would deem it uneconomic and a negative return on investment.

The Friends of Bombala Railway Inc., the Cooma Monaro Railway Inc. and the group pushing for a Cooma to Rock Flat 'picnic train' have aspirations of one day operating some sort of heritage or tourist train services.

This Feasibility Study is not tasked with providing a detailed assessment of the feasibility of any of these other proposals, nor in assessing community benefits of these proposals. The costs of running such operations are starkly illustrated by the Canberra and Dandenong examples (these figures do not include start-up costs which are likely to be quite expensive). In the absence of any detailed information or plans from any of these groups as to how and when they might be able to operate a heritage train service, it is difficult to see that a functional service will operate on the rail corridor in the future given the state of the track and bridges.

The proposed Monaro Rail Trail could be developed in such a way as to allow the Friends of Bombala Railway Inc. and the Cooma Monaro Railway Inc. access to railway tracks, switches and turntables in each of the railway station grounds.

Will the trail provide a quality user experience (terrain/landscape/history)? Yes. The attractiveness of the area and the topography through which the disused railway corridor passes is without doubt highly scenic.

The 213km corridor between Queanbeyan and Bombala passes through one of the most attractive landscapes in Australia. The route provides views of forested areas, bushland reserves, snowcapped mountains, wide treeless plains, sheep and cattle grazing in paddocks, and passes through pretty and interesting small villages and towns. It would be extremely difficult, if not impossible, to find a landscape anywhere in Australia encompassing a disused railway corridor that would rival that found in the Monaro region.

As with all disused railway corridors, the route passes through cuttings, along embankments, across bridges (short and long) and over numerous culverts and creeks and through a tunnel. In addition to the cuttings and embankments of the railway formation, other reminders of the former railway exist all along the corridor including distance pegs (and other railway signs), signals and switches, cattle grids and the remains of sidings and platforms.

The Michelago, Cooma, Nimmitabel and Bombala railway station buildings have been retained and appear to be in very good condition. Other major items of railway infrastructure also have been retained at these stations and within the at rail yards (such as the station platforms, turntables, goods sheds, signals, switches and multiple tracks).

This varied collection of historic artefacts and the variety of scenic attractions and landscapes augurs well for the future enjoyment of the rail trail by a range of users.

The quality experience to be gained by users on the proposed Monaro Rail Trail would be of very high order. The Monaro Rail Trail would pass through some of the most attractive scenery that would differentiate it from other rail trails elsewhere in Australia.

Interpretation of the cultural and natural values of the area will add to the user's experience.

Is there a market for the proposed trail? Yes. Existing rail trails in other states, notably Victoria (including the Murray to the Mountains Rail Trail and the Lilydale to Warburton Rail Trail) are extremely well used and very popular recreational assets of the communities in which they are situated. The existing visitor market (both day trips and overnight trips) is very well established with significant numbers of visitors already coming to the Monaro region and the Snowy Mountains for other high value tourism attractions such as skiing and snowboarding.

This Feasibility Study has examined the potential for users to travel to the Monaro Rail Trail from places such as Canberra (less than 30 minutes from the northern terminus), Sydney, and parts of Victoria specifically for the rail trail and as an added component to their leisure time activities. It is also likely to attract international visitors, like the Otago Central Rail Trail does.

It is highly likely that the proposed rail trail between Queanbeyan and Bombala will become a popular addition to the suite of rail trails available to those who actively seek out these recreational opportunities. The situation in NSW at present (given the legislative impediments to the development of rail trails on former Government railways) has meant that potential rail trail users have to travel to other Australian states (or overseas) to enjoy these recreational

cycling and walking experiences. The future development of additional rail trails in NSW will stimulate interest in, and use of, rail trails in a state largely unaware of rail trails.

Will the rail trail create any unmanageable or unmitigated impacts on adjoining landholders' farming practices and lifestyles? **No.** It is true that a rail trail is a different use to the historic use of the corridor (for trains) and adjoining landholders may have expectations of how the corridor will be used in the future. A rail trail probably was not one of their expectations and they have concerns (and in some cases outright opposition). However, the corridor remains publicly owned land and the issues and concerns raised by adjoining landholders have been satisfactorily addressed in the other rail trails round Australia (of which there are over 100). Evidence shows no long-term negative impacts on farming practices and lifestyles. In consultation, adjoining landholders raised specific local issues (in addition to the range of usual concerns) – notably managing the potential spread of weeds such as African Love Grass and serrated tussock, managing usage in times of extreme weather conditions, installation of fencing in areas where traditionally there was none and the impacts on the biosecurity plans of individual farms. All of these issues can be satisfactorily addressed, managed or mitigated if the trail proceeds. It is important to recognise landholder concerns and, if the trail proceeds, to work closely with them to address individual concerns and arrive at mutually agreed solutions.

Are the local governments and key stakeholders supportive of the concept? The answer is unclear. The Snowy Monaro Regional Council (SMRC) is supportive on the assumption that a train service on the corridor is not reinstated. The Queanbeyan Palerang Regional Council (QPRC) has given its 'in-principle' support to the preparation of this Feasibility Study. However, the QPRC is on record as stating it supports the return of a train service along the corridor.

Funding for this Feasibility Study was provided by the Snowy Monaro Regional Council. Although this does not imply unconditional support, it does indicate a willingness to investigate the benefits of such a trail and the opportunities it might provide.

For the proposed rail trail to be fully effective, the northern terminus should be at the Queanbeyan Railway Station and thereby connected to the cycle network of the ACT and the state's train services. This necessarily implies that the QPRC needs to be supportive of the proposed trail. Without its support, and assuming the SMRC does support the development of the rail trail, the northern terminus would have to be at Michelago which is within the boundaries of the SMRC.

Are there supportive/strong advocates in the community? **Yes.** There does appear to be a ground swell of support from groups and individuals within each of the five communities, as evidenced by the numerous supportive comments obtained during the series of "Open Houses" conducted during the course of this study. It is also evident that there are strong advocates within the communities who have expressed a desire to get more involved in ensuring the proposed rail trail gets developed.





Evidence of business support is plain to see by the display of orange bicycles and signs in shop windows in each of the communities through which the rail trail would pass.

Verbal confirmation of their support was obtained from some of the business proprietors. The Friends of the Monaro Rail Trail Inc. website lists over 30 businesses and 9 community groups that have signed up as supporters.

The Friends of the Monaro Rail Trail Inc. group is very strong and passionate. Its website boasts over 2,000 followers. This commitment is important for the future operations and maintenance of the proposed trail. The NSW Government is particularly keen to see strong community support and a commitment to maintenance by volunteers and community groups.

Is there a supportive community? Yes. Attendance at the “Open House’ sessions, and comments made directly to the consultants or via the comment/feedback forms, indicates a strong level of community support. As outlined elsewhere in this Feasibility Study report, 95.9% of respondents to the on-line survey (via Council’s Your Say web page) stated they supported the proposed Monaro Rail Trail. The origin of the respondents is not known but if they are Canberra-based, or even from elsewhere in NSW, that indeed is good news as they are part of the target market.

However, community opinion is not unanimously favourable to the rail trail, as is the case for any infrastructure project. Based on verbal and written feedback at the Open Houses, the following statements summarise the community views that were presented in these forums:

-  Some adjoining landholders had concerns with the proposal and raised a number of issues. Only a few attendees were vehemently opposed to the proposal, whereas most could see that, if it were to proceed, acceptable solutions could be found to their issues.
-  Some adjoining landowners were very supportive of the project, having either seen and used rail trails in other states/countries or could see benefits occurring to their local communities due to additional visitors spending money. Some could see business opportunities arising.
-  A few people who attended stated that the train proposals should take precedence along the corridor.
-  The vast majority of those who attended were very supportive of the project and said they would use the trail if it were developed. Some had travelled from as far as Canberra and Sydney simply to register their support.

It is reasonable to state that the vast majority of those attendees who were not adjoining landholders were in favour of the proposal. It is also reasonable to state that, of the adjoining land owners who attended, the majority were supportive. This situation is uncommon.

The mix of opinions is typical of most rail trail proposals (and in fact most infrastructure projects). There are some within the community who fear that problems may arise and are somewhat opposed to the prospect of a change to the norm. There are also some who have genuine concerns about a project but are open to potential solutions if engaged correctly – for example, by one on one consultation as part of a trail development (or construction) plan.

The NSW Government recognises that a rail trail, just like all other infrastructure projects, will not receive 100% support. However, it is on the record that it views proposals that have strong community support as an important consideration in its determination of whether to fund a rail trail project.

If the project is to proceed, proponents of the Monaro Rail Trail will need to continue to raise the community’s awareness of the benefits of the project in order to meet the NSW Government’s stipulation of strong community support

Would the trail be value for money? Yes. Trails repeatedly demonstrate that there are numerous benefits to be gained through their construction: economic benefits to the towns where they start and finish and those they pass through – particularly on a multi-day experience as would be the Monaro Rail Trail; a boost to businesses associated with the trail; social and physical health benefits; and a range of environmental and cultural benefits. The business case for the trail is set out in Section 10. In summary, it can be reliably anticipated that development of the proposed rail trail will result in increased annual visitor numbers between 49,000 (if the trail is developed between Michelago and Bombala) and 56,000 (if the trail is developed between Queanbeyan and Bombala) who will inject between \$19 million and \$24 million/year into the region’s economy (depending on which of the two trails is built). Local use rates of between 2,325 people/year and 13,820 people/year will see the injection of between \$5,090 and \$30,265/year into the region’s economy (depending on which of the two trails is built).

Is there a commitment to maintenance (“friends of ...” group or support network)? This has not been explored in any detail. This Feasibility Study identifies likely maintenance costs. The experience of other rail trails (and long distance trails in general) indicates that individuals and community groups (such as Landcare groups, school groups, service clubs, etc) will help to maintain sections of the trail, or areas through which the trail would pass. The Friends of the Monaro Rail Trail is likely to take on board many of the routine maintenance requirements, with many people in the community stating they would like to get involved. The positivity and commitment of the ‘Friends of’ group suggests that it will take a leading role in the ongoing management and maintenance.

Will the trail provide a unique experience? Yes. The landscape associated with this proposed rail trail is extremely attractive, more so than any other disused railway corridor in Australia. This proposed rail trail would add significantly to the range of trail opportunities available to walkers and cyclists in this region and complement other trails already established and proposed in the Snowy Monaro Regional Council area. The highly attractive vistas available all along the proposed rail trail route (in particular the views of the Tinderries and snowcapped Snowy Mountains), the variety of existing rail infrastructure (notably station buildings, cuttings, embankments, historic bridges and the tunnel), and the relative uniqueness of the varied landscapes (farming country, creek valleys, heavily vegetated and relatively undisturbed bushland and the vast open grasslands and treeless plains) add considerable interest.

Is there a demonstrated benefit to trail users and, especially, the host communities? Yes. This question has been answered partially in answers to other questions posed. The demonstrated benefits come in the form of economic and non-economic benefits that will accrue to both users and host communities (with the creation of a range of economic opportunities arising from the development of the rail trail).

11.2 The Recommendation

Following consideration of the major issues pertaining to the development of a trail on the disused railway corridor between Michelago and Bombala (and a northern extension to Queanbeyan in the Queanbeyan Palerang Regional Council) and taking into account the views of key stakeholders, groups and individuals consulted (and background information obtained during the course of the project), this Study recommends that the proposed rail trail proceed, *subject to a number of conditions being met.*

The conditions upon which the rail trail should proceed are:






1. The NSW Government does not proceed with the reinstatement of a train service on the current-disused railway corridor between Queanbeyan and Bombala;
2. The Queanbeyan Palerang Regional Council (QPRC) resolving to actively support the development of a trail on the disused railway corridor within its area (generally Queanbeyan Railway Station to its southern boundary just north of Michelago) in order to create the best possible rail trail. No commitment from QPRC does not mean the trail should not proceed. A rail trail between Michelago and Bombala would be successful.
3. The NSW Government enacting legislation that allows conversion of this rail corridor to a rail trail, and the resolution of legislative and administrative processes that enables the corridor to be vested in another entity;
4. Both Councils (or a Committee of Management) being prepared to accept vesting of the entire former railway corridor between Queanbeyan and Bombala, with an acknowledgement that sub-leases may be required to permit other activities (if appropriate) such the possible future activities of the Cooma Monaro Railway Inc and the Friends of the Bombala Railway Inc;
5. A cooperative approach with the Cooma Monaro Railway Inc. and the Friends of the Bombala Railway Inc. be forged with regard to the shared use of the former railway station precincts at Cooma and Bombala;
6. The project proponents pursue discussions with the Cooma Monaro Railway Inc. and the Friends of the Bombala Railway Inc. to foster the development of complementary activities at the Cooma and Bombala railway stations, including the refurbishment of the infrastructure at the railway yards and the establishment of short tourist rail services (if they can be proven feasible and are approved by the relevant authorities) on track that will be retained within the station grounds;
7. Detailed Trail Development Plans for the rail trail being prepared, which will involve a thorough and comprehensive examination of the entire corridor, the preparation of detailed works lists and cost estimates;
8. A comprehensive programme of one-on-one discussions on-site with affected adjoining landowners be undertaken to ascertain their individual concerns and to work out together solutions to each issue raised;
9. The project proponents (the two Councils) seek funding from external sources (notably the NSW Government and Commonwealth Government) for the construction of the proposed rail trail (and the detailed trail development plan that will need to be prepared prior to construction);
10. A Committee of Management, comprising (at least) representatives of both Councils, the Friends of the Monaro Rail Trail Inc., the Cooma Monaro Railway Inc. and the Friends of the Bombala Railway Inc, the NSW Rural Fire Service, residents of the communities, local landcare groups, local business proprietors and adjoining landowners, be formed to guide the ongoing planning, design and construction, management and maintenance of the proposed Monaro Rail Trail and the former railway corridor. (The Committee of Management could be modelled on successful Victorian examples);








11. The preparation of a Corridor Management Plan before construction, including a comprehensive maintenance programme (detailing the ongoing maintenance) for the trail and corridor;
12. The preparation of a Bush Fire Risk Management Plan for the corridor;
13. Grazing and various other existing uses of the corridor to be considered on their merits, and suitable solutions found to enable the activity to continue where reasonably achievable;
14. The Trail Manager to assume liability responsibility for trail users and are to take all actions possible to mitigate potential claims against landowners and neighbours;
15. A commitment to ongoing maintenance of the trail being given by both Councils, a Committee of Management and volunteers; and
16. The proposed Committee of Management give consideration to the appointment of a trail manager so that landowners have a direct point of contact for issue resolution.

11.3 Factors Supporting the Decision

In formulating a decision about whether the proposed Monaro Rail Trail is feasible or not, due consideration has been given to a range of factors.

From a trail users' perspective, the former railway corridor between Queanbeyan and Bombala is extremely attractive. It offers a range of positive factors. When compared to numerous other disused railway lines elsewhere in Australia (both those which have been converted and those which have not), this is an excellent opportunity.

-  The entire railway corridor between Queanbeyan and Bombala remains in public ownership with few constraints to the development of a trail along its entire length (other than the prospect of a train service being returned).
-  The railway corridor is situated in one of the most scenic landscapes in Australia, with a great diversity of landforms, vegetation and existing historic railway infrastructure (including the numerous and sometimes long timber bridges, a tunnel, embankments and cuttings, the original railway station buildings and outbuildings, sidings, several turntables, switches and signals).
-  The railway corridor offers the potential for a wonderful multi-day trail experience and, coupled with the ideal distance between towns/villages, could become a significant trail destination in NSW, especially when bundled with other attractions and trails of the Snowy Monaro region.
-  The corridor is easily accessible and is within a short distance of Canberra and Sydney (and numerous smaller towns) and is in an established tourism region with high visitation rates both for day-trippers and overnight visitors (especially to the snowfields). Melbourne is also relatively close (at least by air). Adding another attraction will potentially bring additional visitors and keep visitors longer in the area.
-  The development of several trailheads at towns/villages along the trail (as well as the two anchors of Queanbeyan and Bombala) provides for a variety of rides/walks of different lengths.

-  The trail does not have a complicated route through and getting out of Queanbeyan or Bombala (unlike some existing rail trails in Australia and overseas). The proposed crossings of the Monaro Highway that runs through the region could be dealt with comfortably via underpasses or, where the speed limits are low in town areas, via at-grade crossings.
-  Just about all of the major elements of the railway infrastructure remain (the formation, cuttings, embankments and most of the bridges and culverts). Two bridges over minor roads have been removed.
-  Being in an established tourism region means that there is a good supply of accommodation options for visitors coming to use the rail trail, though more may be developed in response to the opportunity provided by the rail trail.
-  The aboriginal history of the Monaro, the surrounding farming properties and various other land uses, the natural qualities of the region, the history of construction of the railway and a host of other interesting subjects results in a huge potential for interpretation along the rail trail – adding to and enriching the experience of trail users.
-  As a rail trail, the 213km corridor is reasonably flat (as it was built with low grades for steam locomotives) and will therefore accommodate the full range of cyclists, as well as walkers, joggers, runners, wheelchair and gopher users etc. The entire trail route would enable a 4 - 5 day cycle ride and perhaps an 8 day walk but there are opportunities to ‘hop’ on and off the rail trail and ride/walk shorter sections.
-  The trail will improve non-motorised transport connections between the newly developing areas at South Jerrabomberra and Queanbeyan and Canberra, promoting walking and bicycle commuting options among local people.
-  As has happened on lengthy rail trails in other locations around Australia, the rail trail will provide local people with a new opportunity for walking, cycling, fun runs, triathlons, half marathons (or full marathons), wheelchair use and educational opportunities for school children.

SECTION 12 – PROJECT IMPLEMENTATION






This Feasibility Study is one of the initial steps in the development of the proposed Monaro Rail Trail. The fieldwork and other investigations carried out in the study have revealed a number of tasks that will need to be undertaken to progress the proposed trail through to fruition.

12.1 Who Should Drive the Project?

The rail trail development programme is a substantial – and complex – project. There are many stakeholders, both private and public, all with a strong interest in this project – some are already involved while some will need to be involved in the future.

The Snowy Monaro Regional Council has been the primary drivers of this phase of work. The Council has taken a pro-active role in facilitating this Feasibility Study and should be commended for being prepared to carry primary responsibility through this process. The role of the Friends of the Monaro Rail Trail Inc. has also been critical in getting the project to this stage.

There are a number of tasks that need completion at this early stage to ensure the project's success. These include:

-  Adoption of this Feasibility Study report by the Snowy Monaro Regional Council;
-  The Queanbeyan Palerang Regional Council resolving to support the project and becoming actively involved;
-  Preparation of a detailed trail development plan (a construction blueprint) for the entire corridor;
-  Seeking NSW Government support for the Monaro Rail Trail; and
-  Sourcing funds for future development of the rail trail.

These primary tasks are critical to the project's eventual success and will require human and financial resources.

It is therefore recommended that the two Councils take the lead role in the next phases of the project, working in conjunction with relevant State Government agencies to implement the development of the rail trail. Following consideration of this Feasibility Study, the Councils will have developed a more detailed understanding of many of the issues and opportunities and are ideally placed to continue to facilitate future stages.

12.2 Further Investigations Required

A number of further investigations are needed before further work on constructing any or all of the trails is undertaken.

Detailed Trail Design (Trail Development Plan)

This project is a Feasibility Study examining the merit and physical constraints of establishing a trail on the disused railway corridor between Queanbeyan and Bombala. By necessity, indicative costs and possible solutions are included. It does not provide detailed trail

development planning that seeks out solutions to all specific issues, nor does it articulate detailed design solutions. It does however provide broad estimates of probable costs, based on an examination of numerous parts of the former railway corridor that identifies likely works required (clearing, trail construction, bridges, drainage, signage, etc).

With respect to individual trail planning, there are two basic elements:

- Individual Trail Feasibility Study – establishes whether a trail route is viable; refines potential alternative trail routes; identifies issues/challenges to trail development; identifies the possible market for the trail; broadly identifies costs; provides feasibility statement on the practicalities of developing the trail; and
- Trail Development Plan – identifies precise route of proposed trail; identifies construction techniques and materials; provides reliable cost estimates and detailed works lists; identifies signage requirements and costs; provides trail inspection and maintenance schedules.

Following the establishment of trail feasibility and the preparation of a detailed trail development plan, trail construction can begin. This process ensures a maximum return on public (and private) investment in trail development work. Far too often, people leap to construct trails without any idea of who uses them, why, when, how much it is going to cost, how to market a trail etc. The result is often trails that are underused and eventually “return to the bush”.

The preparation of a detailed trail development plan will deliver a high quality, locally focussed and well-managed and maintained trail for use by residents and visitors.

If the decision to proceed is taken, the preparation of a trail development plan is the next logical step.

12.3 Trail Construction Stages

Development of trails can often be staged so that parts of trails are developed in line with available funding sources. It is often not possible to open the full length of a trail simultaneously as significant physical, financial, community and institutional work needs to be undertaken. This is the case in many recreational trails around Australia. It has not detracted from their utility or the enjoyment of them by users; however, there is a need to be conscious of how stages are marketed. Promotional material needs to clearly articulate what sections are open and what this means for users.










A staged approach to planning and development is often the best approach as it better suits the capacity of the entity charged with delivering the project. Trails can take up to 10 years to develop from initial planning stages. The “new” Bibbulmun Track in WA was some 4 years in the detailed planning and construction. This was a significant trail project with backing by the State Government – it stands out as a track planned and built relatively quickly. Other rail trail projects provide better illustrations of a realistic timeframe. A Feasibility Study for the Great Victorian Rail Trail was prepared in 2004; the trail opened in 2012. Interestingly, this trail was completely developed in one stage as the result of a large Commonwealth Government grant after the tragic Black Saturday bushfires in 2009. The Port Fairy Warrnambool Rail Trail (a 37km trail) was subject to various studies and plans from 2002; it was opened in 2010 – again all in one stage.

There will always be arguments about where construction of a trail should commence, especially if it is a long trail (as this proposed 213km rail trail is) and it passes through a number of towns and villages.







The most obvious northern terminus is the Queanbeyan Railway Station (especially given its nearness to Canberra), and the southern terminus would be the Bombala Railway Station yards. Starting development of the trail at the nearest point to such a large potential user group almost guarantees an initial high level of use given that people will not have to travel far to commence their trail ride or walk. The Queanbeyan to Michelago section would also immediately provide a commuting pathway for the residents of the South Jerrabomberra residential estate that is currently being developed.

The argument that trail construction should start at the southern end to facilitate economic stimulation of Bombala is valid, but it is two hours from Canberra and that two-hour drive may not entice users to Bombala for what would only be a short ride/walk to Jincumbilly (until all other sections were developed).

The criteria used to determine the recommended stages of development for the trail were:

-  Trail sections anchored in trailheads (preferably near to major population centres).
-  Trail sections enabling local people to use the facility for local walks and rides and for commuting purposes.
-  Construct cheaper sections earlier than expensive ones (affordability).
-  Construct most attractive sections first.
-  Probable economic impacts.
-  Finished product logic.
-  Ease of access for users.
-  Ease of trailhead development.
-  Numbers of rural properties through which the rail trail would pass.

Assessment of potential stages was done in a broad sense against all these criteria, rather than assessing each section against each individual criterion. Combined with the field assessment, consideration of these elements allows the determination of the implementation schedule.

-  Stage 1 of construction: Queanbeyan to Michelago (49kms).
-  Stage 2 of construction: Michelago to Bredbo (30kms).
-  Stage 3 of construction: Bredbo to Cooma (36kms).
-  Stage 4 of construction: Cooma to Nimmitabel (38kms).
-  Stage 5 of construction: Nimmitabel to Jincumbilly (37kms).
-  Stage 6 of construction: Jincumbilly to Bombala (24kms).





If the Snowy Monaro Regional Council decides to proceed with trail construction, and the Queanbeyan Palerang Regional Council remains not involved, construction of the trail would by necessity need to be completely within the SMRC area (with Michelago being the northern terminus and construction commencing in Michelago).

12.4 Sourcing Funding

Once the decision is taken to proceed with the implementation of any of the proposed Monaro Rail Trail, one of the first tasks will be to seek funding for the next phase which is the preparation of a detailed trail development plan (i.e. the construction blueprint). It will also be prudent to start the process of finding construction funding. All funding sources available at that time will need to be identified and funding applications prepared as soon as possible. (Funding programmes often change and are subject to review – current funding programmes are discussed in Section 14).

12.5. Environmental Issues

A number of key environmental issues have been identified. These include:

-  Clearing of regrowth vegetation along the corridor, and the likely need for clearing permits and the possible future need for offset re-vegetation.
-  The potential for the spread of weeds (African Love Grass and serrated tussock) during the construction phase and, potentially, through usage of the trail.
-  Contamination of soils as a result of the operations of the railway and the manner in which former bridges were constructed and maintained.
-  The potential for sedimentation of watercourses as a result of trail construction and bridge works.

In addition, care will need to be taken in the ongoing maintenance of the proposed rail trail to ensure weeds and pathogens are not unwittingly spread by maintenance machinery. Ongoing clearing at the sides of the rail trail will be required to keep the trail corridor at acceptable widths.

The means of ensuring these issues are dealt with would be more fully considered in the next phase of this project – the detailed Trail Development Plan – should it proceed to that stage.

SECTION 13 -TRAIL MANAGEMENT

13.1 Introduction

Once a decision is taken to proceed with the development of the proposed rail trail between Queanbeyan and Bombala, decisions will need to be made about the management regime that will be put in place to manage and maintain the rail trail. A serious commitment to long term management by the trail's proponents will be required, particularly as there is likely to be a significant investment of Government funds.

Ongoing management of the construction programme and operation of the trail will be crucial in achieving sustainable and well-used facilities. Options are available for future management of the trail.

The NSW Government is using the Tumbarumba Rosewood rail Trail (in the Snowy Valleys Council) as a 'pilot' project and this is likely to be the model that all other rail trails in NSW follow. What follows draws on standard administrative practice in Victoria (which has the most mature process for rail trail development and management), provides commentary on the key attributes and issues and provides advice on the types of skills and tasks a management committee should undertake; these elements will not necessarily be governed by whatever administrative procedures are adopted. The commentary is provided as a series of best practice notes. They are also provided for the Council to consider likely ongoing arrangements if the trail proceeds.



The trail manager should install warning signage indicating that trail users should be prepared for inclement weather and sudden changes in the weather, as is done in other places (such as Pelion Gap, Tas). Other management options include trail closures in extreme conditions.

13.2 Common Elements of Good Management

While legislative regimes differ, the operations of many trails across the country are marked by a common set of features. Some common characteristics about all aspects of operation are discussed below.

13.3 Types of Management Structure

There are three primary ways a rail trail (or indeed any trail) can be managed:

- Local Government as sole manager – e.g. Railway Reserves Heritage Trail, WA and the newly developed Tumbarumba Rosewood Rail Trail in NSW

- Local Government as lead player in partnership with other stakeholders (State Government and community) – e.g. Murray to the Mountains, Victoria
- Local Government as a player in the management structure – e.g. Great Southern Rail Trail Victoria; Riesling Trail, SA

Each of the three models has its advantages and disadvantages.

Rail trails where a single Council manages a rail trail are often managed as a recreation asset of the Council, no different from a range of other assets. This has the advantage of simplicity but has no community ownership and buy-in and treats a rail trail as similar to swimming pool or park – assets provided simply for the local community with no outside appeal (bearing in mind that these rail trails will attract visitors).

In the case of the Tumbarumba Rosewood Rail Trail in NSW, an informal community committee (comprising representatives from various sectors of the community including the historical society, landcare etc) has been set up to work cooperatively with the Council staff appointed to construct and maintain the rail trail.

Trails where Local Government is the lead player in partnership with other stakeholders is the most common approach used in Victoria. A strong argument for this model is community ownership. Those involved in a number of trails strongly put forward the view that community involvement needs to be significant and meaningful. If this does not occur, people will say “It’s Council’s problem, why doesn’t Council fix it?” The other advantages of this model are summed up by contrasting it with experiences of trail managers where the Local Government is involved simply as a player.

Those involved in management of the two trails where Councils are involved as simply a player (option 3) believe that Councils should play a much stronger role for various reasons:

- A rail trail project needs solid and proper support from the responsible Council on an ongoing basis and preferably from the project commencement. There is a concern that a long-term vision for the trail is missing. Such long-term views are often (though not always) located within a Council rather than outside a Council structure.
- The project is a community resource (as evidence by the large number of local people using the trail), therefore the community should contribute to the trail (including through the Council).
- One of the challenges for one of the Committees is the process of renewal and that many of the Committee members have been on the Committee since inception (in the late 1990s) and new blood is needed. If a trail sits “within the Council” i.e. is driven or at least strongly supported within the Council, the institution can take a trail through these times of transition much easier than can a community-based model.
- Council should have a significant responsibility in the trail’s management – it should be responsible for seeking funds, for involving the community in a meaningful way and for keeping the project going when community involvement drops (as it inevitably will at times). Many significant funding programmes are open only to Local Governments (rather than community groups). The funding for this Study is one such example.

The Great Southern Rail Trail (Gippsland, Victoria) was entirely community driven; proponents believe that there was, and there continues to be, a need to engage a range of individuals,

organisations and governments – this is a lot easier if the project is driven by the community rather than by Government. One issue that has arisen (though not with rail trails but on other recreational assets) is the sense of proprietorial ownership that can occur when a community group is the sole manager. This has both advantages and disadvantages, but it has been the experience of Local Governments (often around showgrounds) that such proprietorial ownership can lead to management difficulties when changes are required.

The final decision on a management option may well depend on the State Government's position.









The model which is the preferred model for rail trail management across Australia (i.e. the one that is the most common) is one where the Local Government or Governments has a lead role in partnership with other stakeholders.

The Snowy Monaro Regional Council can determine the management structure if it determines to proceed with the rail trail. The NSW Government may also set a preferred management structure.







13.4 Committees of Management

A formal Committee of Management could be established as a way of getting community ownership; this is the established process in Victoria and has been successful in managing a number of rail trails. In Victoria, Committees of Management under the Crown Land (Reserves) Act have a number of powers and duties:

Powers

-  Managing the reserve;
-  Undertaking works and improvements;
-  Using workers;
-  Deriving income;
-  Spending, borrowing and investing;
-  Controlling users;
-  Entering into legal proceedings; and
-  Granting tenancies (licences, leases, permits)

Duties










-  Financial records and auditing;
-  Reporting – financial, annual, performance;
-  Liability insurance – duty of care;
-  Duties as an employer;
-  Council rates (payable by occupiers under lease, licence and tenancies – commercial and agricultural); and
-  Responsibilities under Freedom of Information and Ombudsman requirements.

Committees of Management have traditionally absorbed the responsibility for pursuing the development of a rail trail including the preparation of concept plans and business plans.

Any committee set up to run the trail should have a similar set of powers and duties.

13.5 Skill Sets

At a general level, skill sets that would be useful for the committee to have as a whole include:

-  Leadership skills – critical to hold the committee together, to inspire and motivate, to advocate to a wider audience and to maintain focus on a long-term vision;
-  Community skills – the skills to motivate community and volunteer efforts;
-  Business skills – skills to understand and tap into locally based businesses – the capacity to communicate to businesses in ways that garner their support;
-  Entrepreneurial skills – a business-like approach to running a trail is critical;
-  Administrative skills – expertise and knowledge of government grants, and how to apply for them. General administration skills are also critical;
-  Environmental/scientific skills – understanding of native flora and fauna and wider environmental issues. The ability to communicate these to a wider audience is desirable;
-  Engineering skills – the capacity to understand design and construction of all manner of trail infrastructure;
-  Governmental skills – the ability to liaise with and understand government departments and politicians; and
-  Users – it is essential that the Committee understand the needs and requirements of various targeted user groups.

These ‘selection criteria’ needs to be considered in selecting committee members. Project initiation skills are important in the early stages whereas ongoing management skills are more appropriate once the trail is established.

13.6 Trail Maintenance





Ongoing trail maintenance is a crucial component of an effective management programme – yet it is often neglected until too late. Countless quality trails have literally disappeared because no one planned a maintenance programme, and no one wanted to fund even essential ongoing repairs. It is therefore essential that funds be set aside in yearly budgets for maintenance of this trail (if it proceeds) - to ensure user safety and enjoyment, and to minimise liability risks for land managers.

13.6.1 A Trail Maintenance Plan

Ongoing maintenance costs can be minimised by building a trail well in the first place. A well-constructed trail surface will last considerably longer than a poorly built trail. Signs, gates, posts and bollards installed in substantial footings stand less risk of being stolen or damaged. Well designed, built well and thoughtfully placed management access gates and trail user gates will keep motor vehicles and motorised trail bikes off the trail with a consequent lesser need for surface repairs. Trail furniture (such as seats, trail directional marker posts and interpretation) should be installed (during the construction/upgrading process) in substantial footings sufficient to withstand high winds and theft. These should require minimal ongoing maintenance.

Building good trails in the first place is the very best way of minimising future problems and costs. As a second line of defence, a clear and concise Management Plan with a regular maintenance programme written into it will aid significantly in managing ongoing resource demands.

The goals of a Trail Maintenance Plan are to:

-  Ensure that trail users continue to experience safe and enjoyable conditions;
-  Guard against the deterioration of trail infrastructure, thereby maintaining the investment made on behalf of the community;
-  Minimise the trail manager's exposure to potential public liability claims arising from incidents which may occur along the trail; and
-  Set in place a management process to cover most foreseeable risks.

Most minor repairs (bridges, fences and gates) are largely labour intensive rather than capital expensive. Calamitous events such as fire or flood will naturally generate significant rebuilding activity and consequent costs. These events are generally unmanageable and should simply be accepted as part of the longer-term reality of trail management.

Resourcing a maintenance programme is crucial, and funds will be required on an ongoing basis to enable this essential maintenance. This matter should be addressed in the preparation of the maintenance plan. It would be short sighted to go ahead and build the rail trail and then balk at the demands of managing and maintaining it.

13.6.2 Public Liability and Risk Management

It is prudent that the trail manager is aware that – whether or not visitors are actively encouraged to come to the rail trail – they carry a significant duty of care towards those visitors accessing the trail. The maintenance of a quality trail is therefore critical from this perspective. Legislative changes across Australia have reduced the number of small claims against land managers. However, liability generally rests with the land managers and hence, every attempt should be made to minimise the risk of accident or injury to trail users (and therefore the risk of legal action).

While public liability is certainly an issue for all land managers, it is not a reason to turn away from providing safe, sustainable and enjoyable resources. It is simply a mechanism by which to recognise the responsibilities inherent in managing natural and built resources. Dealing with a perceived liability threat is not about totally removing that threat – it is about doing all that is manifestly possible to provide safe access opportunities for visitors, thereby minimising the risk of liability claims.

A formal Hazard Inspection process is crucial in the ongoing maintenance plan. Not only will this define maintenance required and/or management decisions to be addressed, it is vital in ensuring safe conditions and therefore in dealing with any liability claim which may arise in the future. Courts are strongly swayed by evidence of a clear and functional programme, and a regular series of reports, with follow-up actions, will go a long way to mitigating responsibility for injuries. Further, clearly defined 'User Responsibility' statements in brochures, maps, policy documents, plans and public places will assist this process.

13.6.3 Trail Maintenance Activities

The discussion that follows provides general guidance for the development of maintenance plans should the rail trail proceed. It is not a substitute for specific maintenance plans for a trail. It should be considered as additional advice to any existing maintenance plans for the existing rail trail.

Maintenance on the rail trail should be divided between regular inspections and simple repairs, a one (or two) person job, and quarterly programmes undertaking larger jobs such as significant signage repairs or weed / vegetation control. A range of basic machinery, tools and equipment will be required for this work.

At the core of any trail maintenance programme is an inspection regime. The relevant Australian Standards sets out the basis for frequency of trail inspections. It only covers walking tracks and provides for inspections every 30 days (or less) for Class 1 trails, every 90 days for Class 2 trails, and annually for Class 3-6 trails.

This sets the minimum standard for inspections and is a guide only. What the Australian Standards do not include but should include is an inspection of any trail after significant weather events such as storms, fire, floods, and high winds in addition to the regular inspection programme. The trail should have its own maintenance plan that may, for particular reasons, have more frequent inspections. Particular needs should be recognised in an individual trail maintenance plan.

Clear records of each activity/inspection will be kept by the body with responsibility for maintenance. Pro-formas serve to maximise user safety and minimise liability risks. It will also provide a valuable record of works undertaken and make for efficient use of maintenance resources over time.

In general, Maintenance Plans are based around regular inspections, at which time simple maintenance activities should take place concurrently. More time-consuming maintenance activities should take place every six months, while detailed Hazard Inspections should occur annually. Further, the capacity to respond immediately to random incoming reports of hazards or major infrastructure failures should be built into the Plans.

The presence of trees along some sections of the trail means that time will be spent removing damaged and fallen trees and branches in the aftermath of a storm.



Volunteers organised by the Committee of Management at a busy bee to undertake maintenance work along the rail trail near Port Fairy in western Victoria.

One of the most frequent maintenance tasks will be attending to fallen branches and limbs, repairing trail surfaces, replacing stolen or damaged signs (including road signs), clearing culverts and under bridges and ensuring gates and fences are functioning as intended.

Table 23: Key Elements for a Trail Maintenance Programme

Activity	Notes
<p>Check, repair or replace all trail signage, esp. road-crossings and directional markers</p>	<p>Particular attention needs to be given to signs at road crossings or junctions. Each crossing should be carefully checked to ensure that all signage is present, and that all signs are clearly visible. Particular attention must be given to ensuring that “Trail Crossing ahead” signs (on roadside at approach to trail crossing) are not obscured by overhanging vegetation.</p> <p>Each trailhead should be carefully checked to ensure that all signage is present, and that all signs are clearly visible and legible. An inventory of locations needs to be prepared to assist in regular maintenance.</p> <p>Interpretive panels should be checked for damage and cleaned if necessary. If damage is too great, replacement is essential. An inventory of locations needs to be prepared to assist in regular maintenance.</p>
<p>Check and cut-back overhanging or intruding vegetation</p>	<p>Undergrowth vegetation grows quickly, and over time will continue to intrude into the trail 'corridor'. Such intruding vegetation will need to be cut back to provide clear and safe passage for trail users.</p> <p>Care will be taken to ensure that sharp ends are not left protruding into the trail as these can harm trail users. It should be noted that trailside vegetation hangs lower when wet, and allowances should be made for this when assessing whether or not to prune. "Blow-downs" - trees or limbs that have fallen across the trail - will be cleared as a part of this process. Sight lines must be kept clear either side of road crossings as a part of this process, to ensure that users can clearly see a safe distance either way at road crossings.</p>
<p>Check condition of trail surface for erosion (or other) damage and arrange repairs if necessary; trim off regrowth vegetation</p>	<p>Some of the trail sections will require regular surface maintenance, though this should be minimal as the rail formation was originally constructed with drainage a major consideration. Primary focus will be on erosion damage caused by water flowing down or across the trail and by illegal motor vehicle and trail bike use. This must be repaired as soon as it is noted, or it will get worse, quickly.</p>

	<p>Earthen surfaces may need to be topped up after heavy storms, though good design will minimise such washouts.</p>
<p>Check and clear drains</p>	<p>Drainage maintenance is critical. Drains need to be checked and cleared once or twice/year and after heavy rainfall events. Regular maintenance especially after heavy rainfall is essential.</p> <p>Most maintenance will involve clearing of material from silted up or blocked drains.</p> <p>Any scouring out of table drains should be stabilised as soon as possible.</p> <p>Drain blockages should be cleared as urgent priority.</p> <p>Silt traps at culvert discharges or entry points should be cleared regularly.</p> <p>Drains through cuttings will require attention, though care during construction of trail (through cuttings) will minimise ongoing maintenance requirements.</p>
<p>Check structural stability of built structures such as trailside furniture, bridges, interpretive signage, interpretive shelters</p>	<p>Visual inspection is appropriate though detailed inspection should follow storm events.</p>
<p>Maintain all non-slip surfaces</p>	<p>Maintenance on these surfaces is critical to prevent build-up of conditions that can lead to deterioration. Leaf blowing, sweeping, gurneying and the application of algacide are all appropriate techniques. The appropriate technique and efficiency will be subject to site conditions.</p>
<p>Undertake Hazard Inspection and prepare Hazard Inspection Report</p>	<p>This should be done annually</p>

13.6.4 Maintenance Costs

Maintenance costs are a major consideration in any public infrastructure project. These need to be offset against a range of benefits – both economic and non-economic. Detailed costings are not part of this project but the Council needs to have some understanding of the possible maintenance costs. The following presents a broad discussion on costs informed by other projects and real-life rail trail costs.

Estimating the cost of maintaining a trail is difficult due to the unpredictability of events such as wild fires, ferocious storms, occasional flooding and malicious damage. Heavy rains and the subsequent runoff can cause considerable damage to trail infrastructure – especially if drainage is not attended to well during the construction of the trail. Deliberate and willful damage and vandalism can also contribute significantly to the need for ongoing maintenance and replacement of infrastructure. Volunteers can be organised (through a coordinated programme) to carry out much of the work at a limited cost to the trail manager.

According to a report prepared by the Rail to Trails Conservancy in the USA (*Rail Trail Maintenance and Operation – Ensuring the Future of Your Trails – A Survey of 100 Rail Trails, July 2005*), the cost to maintain trails is hard to determine. The report provides two general answers for why it is difficult to estimate maintenance costs. First, the trail may be part of a larger budget for a single park or even an entire parks and recreation department. Specific costs for the trail aren't separated out. Second, small trail groups, though run by competent and extremely dedicated volunteers, tend to be 'seat-of-the-pants' operations. Maintenance is done "as needed," funds are raised "as needed," and the people are volunteering because they love the trail, not because they love doing administrative tasks like budgeting.

Evidence of actual trail maintenance costs for individual items along a rail trail, or any trail for that matter, are scarce. However, the activities of a strong Committee of Management and an effective volunteer maintenance programme can **significantly** reduce the maintenance burden on a local government.

In Victoria, the Murrindindi Shire Council manages and maintains approximately 85% of the (134km) Great Victorian Rail Trail. It spends around \$2,000/km on maintenance activities each year. Anecdotal information indicates that initial construction issues necessitate an increased level of maintenance of the trail surface (and drainage through cuttings). A higher level of (initial) construction quality (i.e. better trail surfacing and better drainage through cuttings) would mean less ongoing maintenance. At present there is no "Friends of" group to undertake some of this maintenance (and lessen the cost burden of maintenance).

Maintenance responsibility does appear to significantly affect cost. Approximately 60% of the surveyed trails reporting costs were maintained primarily by a government agency, implying paid staff and/or contractors. The other 40% of trails were primarily maintained by a non-profit or volunteer organisation. Annual costs for government-run trails were just over \$US2,000/mile (\$US1,250/km). This is not much more than the overall average of \$US1,500/mile (\$US940/km), but it nearly triples the average for volunteer-run trails of just under \$US700/mile (\$US440/km).

There will be numerous items that will require ongoing attention and maintenance. Fencing and gates should be installed (during the construction process) in substantial concrete footings sufficient to withstand removal by 4WD vehicles. Trail furniture (such as seats, signage, trail directional marker posts and interpretation) should be also installed in substantial concrete footings. These should require minimal ongoing maintenance.

The most frequent maintenance task will be attending to signage. Replacing stolen or damaged trail signage may be required, but how much time spent on this task is guesswork.

The biggest maintenance costs involved are obviously maintenance of the items that initially cost the most to install: the trail surface itself (due to erosion from stormwater runoff and

usage – especially misuse by unauthorised users such as trail bike riders) and maintenance of bridges.

It is difficult estimating the costs involved in maintaining a trail until every last bridge and other infrastructure items have been installed.

As stated earlier, ongoing maintenance can be minimised by building a trail well in the first place. This means the better the initial trail surface, the lower will be the ongoing maintenance of that trail surface.

A similar situation applies to bridges. Reconstructed and refurbished bridges will require little or no maintenance for many years. However, after perhaps a decade of use they will require more and more maintenance of decking timbers (if used) and more scrutiny of fixings (depending on what materials are used for decking).





The use of volunteers to undertake many of the routine repairs and cleaning tasks can substantially reduce the costs to the management authority.

Whilst it is impossible to provide an estimate of ongoing maintenance at this stage, an allowance around **\$4,000/km/year** is not an unreasonable basis on which to work. Some notes on these figures follow:

- The general costs are on the high side of figures that have been obtained in research (noting the caveats in the report about very limited available data). It is a conservative estimate.
- Bridge maintenance costs can be a significant portion of any maintenance bill. Given that this trail will only have a limited number of relatively small bridges, the lower end of this range may be more likely.
- Good asset management practice suggests money be put aside every year for maintenance, even though much of it will not be spent in the first 5-10 years as there will be limited need for maintenance. The dollar figure/km/yr is an “end-case scenario”.
- Costings are at full commercial rates (but of course this would be far less if volunteers are involved). US evidence suggests significant savings using volunteer maintenance (trails maintained by volunteers costs one-third of those maintained by Government entities).
- The maintenance estimate provided in the report is an estimate only based upon certain design parameters and construction standards. For example, repurposing bridges using material other than timber such as expanded steel mesh or fibreglass reinforced plastic for the decking which would have a different maintenance regime and costing.






Local schools, and other groups such as service clubs maintain sections of the Port Fairy to Warrnambool Rail Trail in Victoria.

-  A significant portion of any maintenance budget for any trail is surface repair. There will be very limited need for surface repairs in the first 5 years.
-  Bridge maintenance is also a significant maintenance cost. Bridges are even less likely to need repair for the first 5 years (or even 10 years) of a trail's life. Re-constructed and refurbished bridges will require little or no maintenance for many years. However, after perhaps a decade of use they will require more and more maintenance of decking timbers (if used) and more scrutiny of fixings (depending on what materials are used for decking). Pre-fabricated bridges (suggested for some water crossings) require less maintenance over time.
-  Maintenance on these two critical elements (surface and bridges) is even less likely to be needed in the first 5-10 years if the trail is built well in the first place. The key message is 'spend more on construction and spend less on maintenance'. For example, the newly opened (and well-constructed) Kingaroy-Kilkivan rail trail is only costing \$500/km/year at this early stage of its life
-  The likely maintenance costs in the first few years of a trail's life will focus on sign damage and inspections.

13.6.5 Reducing Maintenance Costs

Using volunteers is the key element in reducing the maintenance costs. Volunteers could undertake much of the ongoing maintenance of the trail if a volunteer maintenance programme is arranged. It should be ensured that whoever is charged with ongoing responsibility for managing the trails has genuine and specific trail knowledge. It is not sufficient to be a skilled gardener, conservationist or environmental scientist. If training is required to bring staff knowledge levels up to a high standard, this should be seen as a priority to be undertaken early in the construction process. Trail skills are better learned over a longer time, with hands-on practice, than in short briefing sessions.

-  The Munda Biddi Trail Foundation assists with planning, developing, marketing and maintaining the trail. It enlists paid memberships, enrolls and manages volunteers, holds trail and community events, and provides information and resources to enhance the quality of the trail experience. **Over 85% of that trail is maintained by volunteers.**
-  Activities of the Friends of the Lilydale to Warburton Rail Trail include revegetation, weed eradication, protection of remnant species, and building and restoration work.
-  Parklands Albury Wodonga a community-based, not for profit organisation focused on undertaking the conservation of "bush parks" in and around Albury-Wodonga from an ecological perspective, whilst allowing sympathetic recreational access. One of the Group's projects is managing and maintaining the High Country Rail Trail.

The Bibbulmun Track is Western Australia's premier long-distance walking track. The Track's success can be put down in large part to the efforts of the Bibbulmun Track Foundation. The Bibbulmun Track Foundation is probably the most successful 'Friends of' Group in Australia, with a paid-up membership in excess of 2,100 (in a number of categories).

The Foundation is not the track manager – this job is done by the Department of Parks and Wildlife (DPAW). The Foundation is a not-for-profit community based organisation established to provide support for the management, maintenance and marketing of the Bibbulmun Track. The Foundation encourages community participation, ownership and education, develops

opportunities for tourism, employment and training, advocates the protection of natural and historical values of the Track, attracts funds and other resources, and promotes the track as accessible to all.

Corporate sponsorship has made possible its “Eyes on the Ground” maintenance volunteer programme – volunteers adopt a section of the track and ensure it remains well maintained. Approximately 780km (80%) of the Track is “managed” in this way by volunteers – a Herculean effort in this time-poor modern environment. They carry out basic maintenance activities such as pruning, clearing minor obstacles, replacing trail markers and keeping campsites clean and report regularly on conditions likely to affect walkers or the long-term future of the Track itself to the track manager. The maintenance volunteers have developed the same sense of ownership of ‘their’ section of Track. There are also office and field activity volunteers.

The Foundation has a number of corporate sponsors and also receives funding from the Lotterywest Trails Grants Programme (WA Lotteries). Importantly, the Foundation has developed a number of paying events on the Track to support its ongoing work.



Trail managers and “Friends of...” groups often arrange ‘Adopt-a-Trail’ programmes to ensure the rail trail is well maintained – by volunteers. In the USA it is common for each section (or kilometre) of a trail to be assigned to, or ‘adopted’ by, a volunteer.

Table 24: Estimate of Maintenance Costs – Queanbeyan to Michelago (49km)

Task	Frequency / note	Possible Costs
Inspect and check trailhead facilities and infrastructure	2 trailheads at average repairs of \$500 per site.	\$1,000
Trail surface - allowance for incidental repairs to, and upgrading of, gravel trail surface.	Allowance of 2% of replacement cost (i.e. 2% of \$2,940,000).	\$58,800
Check side vegetation growth and overhead vegetation and cut back where required. Clearing of fallen trees and branches.	Allowance of 3 person days per 10km section per year (@ \$500/day).	\$7,500
Slashing of trail environs to reduce weeds and fire load/risk. (See Note 1)	Timing dependent on seasonal growth patterns. Allowance for up to 5 times per year.	\$6,250
Inspection and routine maintenance of bridges (all timber components, decking, handrails, etc). Check for obstructions and clearing under bridges.	Allowance of \$5,000 per year for large timber bridges, \$2,000 per year for short timber bridges	\$41,000
Check and clear culverts.	Allowance of 20 hours for checking and cleaning.	\$2,000
Check road crossings. Replace damaged and/or missing signs and undertake other tasks: <ul style="list-style-type: none"> - Give Way signs - Road Ahead signs - Trail Crossing warning signs - Road name signs - Regulatory signs - Check sight distances and clear vegetation if necessary 	6 crossings (major and minor) at average repairs of \$300 per crossing.	\$1,800
Inspection of and allowance for replacement of trail directional marker logo/arrow plates and trail kilometre posts (incorporating Emergency Markers)	2 replacements per 10km section per year (i.e. 10 replacements @ \$400 ea).	\$4,000

Allowance for repairs to trailside furniture and occasional replacements (when required).	Inspection and minor repairs every 6 months. 1 replacement per year.	\$1,000
Check miscellaneous signs along trail (e.g. Road Ahead, Give Way, trail name, distance signs, “No Trespassing”, bridge load signs, etc).	5 replacements per 10km section per year (i.e. 25 signs @ \$200 ea).	\$5,000
Check management access gates and fences at road crossings. Make repairs where necessary.	Allowance of \$5,000 per year for repairs.	\$5,000
Check toilets (2).	Allowance for cleaning (5 times each @\$200/visit)	\$2,000
Check operation of stock crossings (fences, gates and grids).	Allowance for minor repairs (20 @ \$100 ea)	\$2,000
Check interpretation along trail for damage and structural stability.	Allowance for replacement of 1 panel per year.	\$1,000
Inspection of rail trail (3 times/year).	Allowance for 3 inspection trips per year	\$4,500
Preparation of annual Hazard Inspection Report.	1 person days @ \$1,000/day.	\$1,000
\$143,850 excl GST (per annum)		

This equates to a rate of approximately \$2,936/per kilometre per annum.

Table 25: Estimate of Maintenance Costs – Michelago to Bredbo (30km)

Task	Frequency / note	Possible Costs
Inspect and check trailhead facilities and infrastructure	1 trailhead at average repairs of \$500 per site	\$500
Trail surface - allowance for incidental repairs to, and upgrading of, gravel trail surface.	Allowance of 2% of replacement cost (i.e. 2% of \$1,800,000).	\$36,000
Check side vegetation growth and overhead vegetation and cut back where required. Clearing of fallen trees and branches.	Allowance of 3 person days per 10km section per year (@ \$500/day).	\$4,500

Slashing of trail environs to reduce weeds and fire load/risk. (See Note 1)	Timing dependent on seasonal growth patterns. Allowance for up to 5 times per year.	\$3,750
Inspection and routine maintenance of bridges (all timber components, decking, handrails, etc). Check for obstructions and clearing under bridges.	Allowance of \$5,000 per year for large timber bridges, \$2,000 per year for short timber bridges	\$56,000
Check and clear culverts.	Allowance of 20 hours for checking and cleaning.	\$2,000
Check road crossings. Replace damaged and/or missing signs and undertake other tasks: <ul style="list-style-type: none"> - Give Way signs - Road Ahead signs - Trail Crossing warning signs - Road name signs - Regulatory signs - Check sight distances and clear vegetation if necessary 	8 crossings (major and minor) at average repairs of \$300 per crossing	\$2,400
Inspection of and allowance for replacement of trail directional marker logo/arrow plates and trail kilometre posts (incorporating Emergency Markers)	2 replacements per 10km section per year (i.e. 6 replacements @ \$400 ea).	\$2,400
Allowance for repairs to trailside furniture and occasional replacements (when required).	Inspection and minor repairs every 6 months. 1 replacement per year.	\$1,000
Check miscellaneous signs along trail (e.g. Road Ahead, Give Way, trail name, distance signs, "No Trespassing", bridge load signs, etc).	5 replacements per 10km section per year (i.e. 15 signs @ \$200 ea).	\$3,000
Check management access gates and fences at road crossings. Make repairs where necessary.	Allowance of \$3,000 per year for repairs.	\$3,000
Check toilets (2).	Allowance for cleaning (5 times each @\$200/visit)	\$2,000

Check operation of stock crossings (fences, gates and grids).	Allowance for minor repairs (20 @ \$100 ea)	\$2,000
Check interpretation along trail for damage and structural stability.	Allowance for replacement of 1 panel per year.	\$1,000
Inspection of rail trail (3 times/year).	Allowance for 3 inspection trips per year	\$4,500
Preparation of annual Hazard Inspection Report.	1 person days @ \$1,000/day.	\$1,000
\$125,050 excl GST (per annum)		

This equates to a rate of approximately \$4,168/per kilometre per annum.

Table 26: Estimate of Maintenance Costs – Bredbo to Cooma (36km)

Task	Frequency / note	Possible Costs
Inspect and check trailhead facilities and infrastructure	1 trailhead at average repairs of \$500 per site	\$500
Trail surface - allowance for incidental repairs to, and upgrading of, gravel trail surface.	Allowance of 2% of replacement cost (i.e. 2% of \$2,160,000).	\$43,200
Check side vegetation growth and overhead vegetation and cut back where required. Clearing of fallen trees and branches.	Allowance of 3 person days per 10km section per year (@ \$500/day).	\$6,000
Slashing of trail environs to reduce weeds and fire load/risk. (See Note 1)	Timing dependent on seasonal growth patterns. Allowance for up to 5 times per year.	\$5,500
Inspection and routine maintenance of bridges (all timber components, decking, handrails, etc). Check for obstructions and clearing under bridges.	Allowance of \$5,000 per year for large timber bridges, \$2,000 per year for short timber bridges	\$66,000
Check and clear culverts.	Allowance of 20 hours for checking and cleaning.	\$2,000
Check road crossings. Replace damaged and/or missing signs and undertake other tasks:	7 crossings (major and minor) at average repairs of \$300 per crossing	\$2,100

<ul style="list-style-type: none"> - Give Way signs - Road Ahead signs - Trail Crossing warning signs - Road name signs - Regulatory signs - Check sight distances and clear vegetation if necessary 		
Inspection of and allowance for replacement of trail directional marker logo/arrow plates and trail kilometre posts (incorporating Emergency Markers)	2 replacements per 10km section per year (i.e. 8 replacements @ \$400 ea).	\$3,200
Allowance for repairs to trailside furniture and occasional replacements (when required).	Inspection and minor repairs every 6 months. 1 replacement per year.	\$1,000
Check miscellaneous signs along trail (e.g. Road Ahead, Give Way, trail name, distance signs, “No Trespassing”, bridge load signs, etc).	5 replacements per 10km section per year (i.e. 20 signs @ \$200 ea).	\$4,000
Check management access gates and fences at road crossings. Make repairs where necessary.	Allowance of \$4,000 per year for repairs.	\$4,000
Check toilets (2).	Allowance for cleaning (5 times each @\$200/visit)	\$2,000
Check operation of stock crossings (fences, gates and grids).	Allowance for minor repairs (30 @ \$100 ea)	\$3,000
Check interpretation along trail for damage and structural stability.	Allowance for replacement of 1 panel per year.	\$1,000
Inspection of rail trail (3 times/year).	Allowance for 3 inspection trips per year	\$4,500
Preparation of annual Hazard Inspection Report.	1 person days @ \$1,000/day.	\$1,000
<i>\$149,000 excl GST (per annum)</i>		

This equates to a rate of approximately \$4,138/per kilometre per annum.

Table 27: Estimate of Maintenance Costs – Cooma to Nimmitabel (38km)

Task	Frequency / note	Possible Costs
Inspect and check trailhead facilities and infrastructure	1 trailhead at average repairs of \$500 per site	\$500
Trail surface - allowance for incidental repairs to, and upgrading of, gravel trail surface.	Allowance of 2% of replacement cost (i.e. 2% of \$2,280,000).	\$45,600
Check side vegetation growth and overhead vegetation and cut back where required. Clearing of fallen trees and branches.	Allowance of 3 person days per 10km section per year (@ \$500/day).	\$6,000
Slashing of trail environs to reduce weeds and fire load/risk. (See Note 1)	Timing dependent on seasonal growth patterns. Allowance for up to 5 times per year.	\$4,750
Inspection and routine maintenance of bridges (all timber components, decking, handrails, etc). Check for obstructions and clearing under bridges.	Allowance of \$5,000 per year for large timber bridges, \$2,000 per year for short timber bridges	\$54,000
Check and clear culverts.	Allowance of 20 hours for checking and cleaning.	\$2,000
Check road crossings. Replace damaged and/or missing signs and undertake other tasks: <ul style="list-style-type: none"> - Give Way signs - Road Ahead signs - Trail Crossing warning signs - Road name signs - Regulatory signs - Check sight distances and clear vegetation if necessary 	13 crossings (major and minor) at average repairs of \$300 per crossing	\$3,900
Inspection of and allowance for replacement of trail directional marker logo/arrow plates and trail kilometre posts (incorporating Emergency Markers)	2 replacements per 10km section per year (i.e. 8 replacements @ \$400 ea).	\$3,200

Allowance for repairs to trailside furniture and occasional replacements (when required).	Inspection and minor repairs every 6 months. 1 replacement per year.	\$1,000
Check miscellaneous signs along trail (e.g. Road Ahead, Give Way, trail name, distance signs, “No Trespassing”, bridge load signs, etc).	5 replacements per 10km section per year (i.e. 20 signs @ \$200 ea).	\$4,000
Check management access gates and fences at road crossings. Make repairs where necessary.	Allowance of \$4,000 per year for repairs.	\$4,000
Check toilets (2).	Allowance for cleaning (5 times each @\$200/visit)	\$2,000
Check operation of stock crossings (fences, gates and grids).	Allowance for minor repairs (30 @ \$100 ea)	\$3,000
Check interpretation along trail for damage and structural stability.	Allowance for replacement of 1 panel per year.	\$1,000
Inspection of rail trail (3 times/year).	Allowance for 3 inspection trips per year	\$4,500
Preparation of annual Hazard Inspection Report.	1 person days @ \$1,000/day.	\$1,000
\$140,450 excl GST (per annum)		

This equates to a rate of approximately \$3,696/per kilometre per annum.

Table 28: Estimate of Maintenance Costs – Nimmitabel to Jincumbilly (37km)

Task	Frequency / note	Possible Costs
Inspect and check trailhead facilities and infrastructure	trailhead at average repairs of \$500 per site	\$500
Trail surface - allowance for incidental repairs to, and upgrading of, gravel trail surface.	Allowance of 2% of replacement cost (i.e. 2% of \$2,220,000).	\$44,400
Check side vegetation growth and overhead vegetation and cut back where required. Clearing of fallen trees and branches.	Allowance of 3 person days per 10km section per year (@ \$500/day).	\$6,000

Slashing of trail environs to reduce weeds and fire load/risk. (See Note 1)	Timing dependent on seasonal growth patterns. Allowance for up to 5 times per year.	\$4,625
Inspection and routine maintenance of bridges (all timber components, decking, handrails, etc). Check for obstructions and clearing under bridges.	Allowance of \$5,000 per year for large timber bridges, \$2,000 per year for short timber bridges	\$46,000
Check and clear culverts.	Allowance of 20 hours for checking and cleaning.	\$2,000
Check road crossings. Replace damaged and/or missing signs and undertake other tasks: <ul style="list-style-type: none"> - Give Way signs - Road Ahead signs - Trail Crossing warning signs - Road name signs - Regulatory signs - Check sight distances and clear vegetation if necessary 	9 crossings (major and minor) at average repairs of \$300 per crossing	\$2,700
Inspection of and allowance for replacement of trail directional marker logo/arrow plates and trail kilometre posts (incorporating Emergency Markers)	2 replacements per 10km section per year (i.e. 8 replacements @ \$400 ea).	\$3,200
Allowance for repairs to trailside furniture and occasional replacements (when required).	Inspection and minor repairs every 6 months. 1 replacement per year.	\$1,000
Check miscellaneous signs along trail (e.g. Road Ahead, Give Way, trail name, distance signs, “No Trespassing”, bridge load signs, etc).	5 replacements per 10km section per year (i.e. 20 signs @ \$200 ea).	\$4,000
Check management access gates and fences at road crossings. Make repairs where necessary.	Allowance of \$4,000 per year for repairs.	\$4,000
Check toilets (2).	Allowance for cleaning (5 times each @\$200/visit)	\$2,000

Check operation of stock crossings (fences, gates and grids).	Allowance for minor repairs (35 @ \$100 ea)	\$3,500
Check interpretation along trail for damage and structural stability.	Allowance for replacement of 1 panel per year.	\$1,000
Inspection of rail trail (3 times/year).	Allowance for 3 inspection trips per year	\$4,500
Preparation of annual Hazard Inspection Report.	1 person days @ \$1,000/day.	\$1,000
\$130,425 excl GST (per annum)		

This equates to a rate of approximately \$3,525/per kilometre per annum.

Table 29: Estimate of Maintenance Costs – Jincumbilly to Bombala (24km)

Task	Frequency / note	Possible Costs
Inspect and check trailhead facilities and infrastructure	1 trailhead at average repairs of \$500 per site	\$500
Trail surface - allowance for incidental repairs to, and upgrading of, gravel trail surface.	Allowance of 2% of replacement cost (i.e. 2% of \$1,440,000).	\$28,800
Check side vegetation growth and overhead vegetation and cut back where required. Clearing of fallen trees and branches.	Allowance of 3 person days per 10km section per year (@ \$500/day).	\$3,750
Slashing of trail environs to reduce weeds and fire load/risk. (See Note 1)	Timing dependent on seasonal growth patterns. Allowance for up to 5 times per year.	\$3,000
Inspection and routine maintenance of bridges (all timber components, decking, handrails, etc). Check for obstructions and clearing under bridges.	Allowance of \$5,000 per year for large timber bridges, \$2,000 per year for short timber bridges	\$0
Check and clear culverts.	Allowance of 20 hours for checking and cleaning.	\$2,000
Check road crossings. Replace damaged and/or missing signs and undertake other tasks:	16 crossings (major and minor) at average repairs of \$300 per crossing	\$4,800

<ul style="list-style-type: none"> - Give Way signs - Road Ahead signs - Trail Crossing warning signs - Road name signs - Regulatory signs - Check sight distances and clear vegetation if necessary 		
Inspection of and allowance for replacement of trail directional marker logo/arrow plates and trail kilometre posts (incorporating Emergency Markers)	2 replacements per 10km section per year (i.e. 4 replacements @ \$400 ea).	\$1,600
Allowance for repairs to trailside furniture and occasional replacements (when required).	Inspection and minor repairs every 6 months. 1 replacement per year.	\$1,000
Check miscellaneous signs along trail (e.g. Road Ahead, Give Way, trail name, distance signs, "No Trespassing", bridge load signs, etc).	5 replacements per 10km section per year (i.e. 10 signs @ \$200 ea).	\$2,000
Check management access gates and fences at road crossings. Make repairs where necessary.	Allowance of \$2,000 per year for repairs.	\$2,000
Check toilets (2).	Allowance for cleaning (5 times each @\$200/visit)	\$2,000
Check operation of stock crossings (fences, gates and grids).	Allowance for minor repairs (30 @ \$100 ea)	\$3,000
Check interpretation along trail for damage and structural stability.	Allowance for replacement of 1 panel per year.	\$1,000
Inspection of rail trail (3 times/year).	Allowance for 3 inspection trips per year	\$4,500
Preparation of annual Hazard Inspection Report.	1 person days @ \$1,000/day.	\$1,000
<i>\$60,950 excl GST (per annum)</i>		

This equates to a rate of approximately \$2,540/per kilometre per annum.

Note 1: *The necessity to slash could be much reduced if the rail trail is located within a narrower, fenced corridor and adjoining landowners graze stock within that part of the corridor deemed 'surplus to requirements'. Slashing costs are based on the fencing option whereby the corridor is fully fenced (resulting in a 6m wide trailway). Any other options will mean higher maintenance costs.*

Note 2: *Use of volunteers would substantially reduce maintenance costs.*

Note 3: *Reporting of routine maintenance requirements by trail users will obviate need for many scheduled inspections.*

Note 4: *Appointment of a Trail Manager, with responsibility for regular inspections of entire trail, will substantially reduce need for unscheduled and expensive maintenance.*

Note 5: *Maintenance on the two critical elements (surface and bridges) is unlikely to be needed in the first 5-10 years if the trail is built well in the first place*

SECTION 14 – RESOURCES AND FUNDING OPPORTUNITIES

(Note: Funding programmes do change; the information presented in this report is current at the time of writing).




Once the decision is taken to proceed, one of the first tasks will be to seek development funding. All funding sources available at that time will need to be identified and funding applications prepared as soon as possible, and dedicated resources made available. The Commonwealth and State Governments regularly review funding programmes (particularly before and after elections); such decisions make the need to review this section at the time of seeking grants critical.

14.1 Commonwealth Government

The \$841.6 million Building Better Regions Fund (BBRF) supports the Australian Government's commitment to create jobs, drive economic growth and build stronger regional communities into the future. This includes a further \$200 million for a fourth round of the programme which is anticipated to open in the second half of 2019 (at the time of writing, the programme has not opened).

There are two streams of funding available under the programme – Infrastructure Projects Stream and Community Investment Streams. The Infrastructure Projects stream is the most relevant as it supports projects which involve the construction of new infrastructure, or the upgrade or extension of existing infrastructure that provide economic and social benefits to regional and remote areas. It provides grants between \$20,000 and \$10 million. For most projects grant funding will be up to 50 per cent or up to 75 per cent of eligible project costs. Project location will determine the percentage of grant funding. Local Governments are eligible for the funds. Projects must be completed by December 2021.

Outdoor recreation generally and trail projects specifically have been funded by this programme in past years. It has funded a large number of walk and cycle trails, and mountain bike trails and mountain bike “destinations” across the country. Of direct relevance to this project, the programme has funded a number of rail trail initiatives. These are:

-  Somerset Regional Council (Queensland) received \$1.4 million to complete the Brisbane Valley Rail Trail.
-  Alpine Shire Council (Vic) received \$1.3 million for the Great Valley Trail project completes the shared trail between Bright and Harrietville. The 14 kilometre trail will link the end of the Murray to Mountains Rail Trail at Bright with Victoria's Alpine Region.
-  Parklands Albury Wodonga Limited (Vic) received \$91,000 for completing the Shelley to Tallangatta Rail Trail. The project involves restoring a collapsed section of a historic trestle bridge and gravelling a section of the rail trail.

Funding grants under this programme are also quite significant. Two trail projects provide good examples:

-  East Gippsland Shire Council (Vic) received \$1.5 million for the first stage of the Omeo Mountain Bike Destination Project including funds for design and construction of mountain bike tracks.

- Yarra Ranges Shire Council (Vic) received \$3 million for the construction of 100 kilometres of mountain bike trails on the hills surrounding the town of Warburton.

Infrastructure activities are not eligible for the Community Investments Stream.

In February 2018, the Commonwealth Government committed \$6.5 million to the Northern Rivers Rail Trail through the Regional Jobs and Investment Programme. Unfortunately, that programme was only available to selected regions and the Monaro Rail Trail is not in one of those regions (in addition, the programme does not appear to be operational at the time of writing)

14.2 NSW Government

Details of NSW Government funding programmes for rail trails are not clear and have changed over time. In 2014, the NSW Government announced the creation of the **Regional Tourism Infrastructure Fund** (RTIF). The \$110 million fund was (according to the Government) to enable regional destinations to develop their full potential by investing in critical visitor economy infrastructure, such as airport upgrades and cruise and rail trail infrastructure. In the initial announcement, \$50 million (of the \$110 million) was dedicated to rail trail development. In early 2015, the Minister for Regional Development announced that the \$50 million would be limited to two corridors – Tumbarumba Rosewood and the Northern Rivers (Casino – Lismore – Byron Bay - Murwillumbah). In June 2015, it was announced that only \$5 million would be allocated from the RTIF to develop the Tumbarumba-Rosewood Rail Trail as a pilot project. The Northern Rivers Rail Trail submission was unsuccessful.

The NSW Government has committed \$5 million funding to the proposed Tumbarumba Rosewood Rail Trail (part of the Wagga Wagga to Tumbarumba line) as a ‘pilot’ project. Construction is now underway and it is understood that the State Government has supplied additional funds. As noted above, this funding was made available through the Regional Tourism Infrastructure Fund (a component of which was specifically set aside for rail trails).




In August 2017, the NSW Government committed \$6.5 million to the Northern Rivers Rail Trail pilot project (matched as noted in 14.1 by the Commonwealth Government). It is not clear which programme funded this contribution. It may have been funded from the \$300 million Regional Growth – Environment and Tourism Fund which invests in infrastructure to increase tourist visitation to regional NSW and create jobs. This fund particularly focuses on assets that will grow and further diversify NSW regional economies.

At this stage, there does not appear to be a specific fund for rail trail development in NSW, a contrast to the position adopted by the Queensland Government which has committed \$14 million over 4 years to plan and develop rail trails specifically as part of its *Queensland Cycling Action Plan*. The NSW State Government has yet to evaluate current pilot projects – it may be that once this is done, funding will be made available through such programmes as the Regional Growth – Environment and Tourism Fund. At least one other rail trail project is being prepared by its advocates for submission to this funding programme.

14.3 Private Sponsorship

Sponsorship is big business – and very competitive. Two main options exist: either negotiate with local/national corporate entities which have a geographical and social connection with the area through which a trail passes or go after the ‘big’ players for big projects. Many large companies have formalised sponsorship programmes.

Elsewhere in Australia, funding for trail development has been received from a number of major (and minor local) companies.





-  Alcoa has been a major contributor to Western Australia’s two premier long distance tracks – the Bibbulmun Track (walk) and the Munda Biddi Trail (mountain bike).
-  BHP Billiton provided over \$200,000 for the Coast to Crater Rail Trail in western Victoria to help construction.
-  GlaskoSmithKline Australia has donated \$10,000 to the development of the Warrnambool to Port Fairy rail trail project to encourage employees to combine their physical exercise with commuting to work. GSK has stated “We are proud to contribute to the establishment of the Port Fairy rail trail through our Community Partnerships Programme. We see this project as being of benefit not only to our own employees, but also to the local community as a whole.”

Significant sums can be gained if benefits can be proven. Any company with an operation within the region would appear to be a potential sponsor.

Companies are looking to be good local citizens and being associated with a positive asset such as a trail can be good for business. Companies should be approached with the message that such a project will bring a number of benefits to the region. Any approaches to corporate sponsors should focus on a main message that trails and the company products provide an alliance of healthy sustainable living and healthy sustainable products and sustainable economic opportunities (if such a link exists).

Corporate entities are looking to make community commitments in a number of ways other than direct funding. The Macquarie Bank Foundation looks to supply time and expertise as well as funding. Many other banks have both a competitive grants programme and a volunteer scheme that provides paid volunteer leave to every employee. Organisations such as the ANZ and National Banks also look for community development options for their staff e.g. corporate team building days are held on a trail. It is important to note that, when considering these options, there are often exclusivity provisions around such programmes.

What is important in dealing with potential corporate sponsors is to have:

-  a clear trail development plan (the next stage of work should the trail proceed);
-  a well-developed message;
-  clear pointers as to what and where their engagement might be; and
-  a clear indication of how they might benefit from their involvement.

14.4 Other Trail Funding Resources

14.4.1 The Heart Foundation

The Heart Foundation Local Government Awards are held each year to acknowledge projects and initiatives that local councils and organisations are delivering in their communities to promote and improve heart health. While not a significant source of funds, there is a \$5,000 prize for the overall winner and a \$2,000 prize for each State winner. The award also offers positive promotional opportunities. The award is for Local Governments rather than community-based organisations; this does provide a “hook” for councils to become involved in a trail project.

The Murray to the Mountains Rail Trail has won the Best Overall project. Lake Fred Tritton, an artificial lake in Richmond Shire (Qld) with a significant walk trail constructed around its edges, won the Best Overall project and the Recreation Infrastructure Project in 2004. The Peninsular Pathlinks Programme, a programme to develop 77 kilometres of new trails and walkways in the 42 communities in the Mornington Peninsula Shire (Victoria) won the Best Overall project and the Recreation Infrastructure Project in 2005. For further details, the Heart Foundation’s website is www.heartfoundation.com.au.

14.4.2 Work for the Dole

Schemes to provide meaningful work experience and some training for long-term unemployed are provided under the Work for the dole scheme. The programme generally only supplies labour – the host agency is responsible for tools, materials, technical supervision etc.

14.4.3 Conservation Volunteers Australia

Conservation Volunteers Australia provides small crews of volunteers, with a supervisor, to undertake environmental activities. Teams of between five and eight people work for one to two weeks. An administration fee is imposed by CVA. Materials, tools and technical supervision need to be provided by the host agency. CVA has been involved in trails project elsewhere in Australia – they were heavily involved in construction of a new walking track around the base of Mt Tibrogargan in the Glasshouse Mountains in South East Queensland. This trail is of the highest quality and is a testimony to their skills as trail builders.

14.4.4 Prison Crews

Crews of minimum-security inmates have worked extensively in trail construction in Western Australia in the last 15 years. In the Northern Territory, NSW and Queensland, prison crews have been successfully used recently on trail and park projects.

For example, the Gympie Regional Council (in Queensland) has partnered with Gympie Probation and Parole to help maintain the station yards of the Mary Valley Rattler. The hours committed and the dollar value of those hours are not insignificant. In 2013/14, community service workers attached to Gympie Probation and Parole contributed a total of 6,917 community service hours (valued at over \$150,000) to volunteer community groups, Council initiatives, church groups and sporting clubs across the Gympie region by community service workers.

The labour supplied by inmates goes directly towards each community organisations’ and Councils’ goals, while the inmates gain an opportunity to develop positive work habits, self-discipline and pro-social behaviours within a working environment.

14.4.5 Volunteers

Volunteers are often the last thought-of resource but are often the most effective. Many trails are only built – and then kept alive – by volunteer input.

There is also a growing network of trail advocates whose experience is extremely worthwhile. Concerns have been expressed in a number of forums (including popular media) about getting volunteers in a time when people have very busy lifestyles. This is acknowledged; however, the Bibbulmun Track in Western Australia provides an encouraging lesson (where some 80% of the 1,000km trail is maintained by volunteers).

Volunteer labour can also be used in innovative ways to benefit a number of community sectors. The Lilydale Warburton Rail Trail (Victoria) needed bridge construction and put out a public tender for the work. The tender was won by the local branch of the Country Fire Authority, which needed a new fire engine. Labour in bridge construction was “swapped” for a new fire engine.

14.4.6 Philanthropy

There are a number of philanthropic organisations in Australia (though not in the same numbers as the USA). The brief has not permitted time to extensively research all these.

The Macquarie Bank Foundation currently contributes more than \$2.5 million a year in community grants. Its core areas include the health care and research, the environment and the arts (trails can address each of these core areas).

The Ian Potter Foundation has a number of interests, including environment and conservation (details can be found at www.ianpotter.org.au). Its Environment and Conservation programme supports small projects that combine elements of biodiversity and ecology preservation, volunteerism and community education. A trail development could fall within this mandate.

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