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Kingaroy to Theebine Rail Trail (KTTRT)

Feasibility Study and Business case

Version: 3 September 2012

Not Queensland Government Policy

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Abbreviations

CASC	Cherbourg Aboriginal Shire Council
ctt	car travel time
DSDIP	Department of State development, Infrastructure and Planning
DTMR	Department of Transport and Main Roads
GRC	Gympie Regional Council
KTrc	Kingaroy to Theebine railway corridor land
KTRT	Kingaroy to Theebine Rail Trail
QR	Queensland Rail Limited
SBRC	South Burnett Regional Council
SEQ	South East Queensland
WBB	Wide Bay Burnett

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Kingaroy to Theebine Rail Trail Feasibility Study and Business Case

Executive Summary

Rail trails defined

A *rail trail* is a closed railway line which is converted to a recreation trail - usually for non-motorised activities such as walking, cycling and horse riding. Typically, any rail infrastructure which cannot be modified for recreation trail purposes is removed and the remaining structures are converted for the intended recreational uses. Rail trails do not include *historic railways* which operate superseded railway engines and rolling stock on otherwise unused rail lines.

Theebine to Kingaroy railway line history

Construction of the 132 kilometre Theebine to Kingaroy rail line started at Theebine in 1895, reached Kingaroy in 1904 and Nanango in 1911. Branch (or "spur") lines were subsequently constructed from Murgon to Preston, Kingaroy to Tarong and Murgon to Windera. In 1961, the Nanango to Kingaroy line and the various branch lines were closed. In December 2009, the Department of Transport and Main Roads closed the Theebine to Kingaroy rail line as part of the Queensland Government's *Branch Line Rationalisation Initiative*.

About one third of the Theebine to Kingaroy rail line (the sections between Kingaroy and Manyung) is in the South Burnett Regional Council area. Between Wondai and Murgon, the rail line forms the western boundary of the Cherbourg Aboriginal Shire Council area. The remainder is in Gympie Regional Council area. Refer to Map 1 on page #. Note that about 1.5 kilometres of rail line and corridor land between Theebine and Old Gympie Road is retained by Queensland Rail Limited for development as a shunting yard and maintenance facility and is not available for re-development as rail trail.

Purpose of this report

This study assesses the feasibility of redeveloping the closed Kingaroy to Theebine railway line, and associated land corridor, as a rail trail. In this report, the potential rail trail is called the *Kingaroy to Theebine Rail Trail*. This feasibility study is intended to inform further community consultation and decision making by the affected local governments and relevant State agencies.

Project steering committee

A steering committee consisting of representatives of the Department of Transport and Main Roads, Department of State Development, Infrastructure and Planning and South Burnett Regional Council has managed the development of this feasibility study.

Policy and planning context

The Queensland Government recognises tourism as one of the *Four Pillars* of Queensland's economy. Development of this rail trail would stimulate new tourism business opportunities in the South Burnett and Gympie regions. Both regions are within 2.5 hours travel time of South East Queensland where there is significant demand for trails-related tourism opportunities from a population expected to grow from 3.2 million in 2011 to 4.4 million by 2031. The market segments related to trails-based tourism are listed in Table 1.

Table 1: Tourism markets relevant to the proposed Kingaroy to Theebine Rail Trail

Farm Stay	Country Destination	Adventure	Bed and Breakfast
Grey Nomads	Wildlife Watching	Nature-Based	Landscape Appreciation
Bicycle	Caravan and Camping	Eco-tourism	Adventure Racing
Bushwalking	Railway Heritage	Horse Riding	Pack Animal Assisted

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Organisations that have planning documents which recognise the potential for re-development of this rail line as a *rail trail* include:

- Tourism Queensland in *the South East Queensland Country Tourism Opportunity Plan 2009-2019* (page 20)
- Department of Transport and Main Roads in the *Queensland Cycle Strategy 2009-2021* (page 76) and the *Wide Bay Burnett Integrated Transport Plan Discussion Paper 2007* (pages 14 and 27)
- The Department of State Development, Infrastructure and Planning in the *Wide Bay Burnett Regional Plan September 2011* (Program 2.5.6 on page 66)
- In the *Wide Bay Burnett Regional Recreation and Sport Strategy April 2010* (Page 51)
- by South Burnett Regional Council through planning and membership of the Kingaroy to Theebine Rail Trail Steering Committee and in their Community Plan.

The demand for trails-based tourism from South East Queensland, other major Australian cities and internationally is well understood and growing. Similarly, the physical, psychological and social health benefits of participation in trails-related activities, such as walking, cycling and horse riding, are significant and well known.

There is significant potential added value if, in the long-term, the proposed Kingaroy to Theebine Rail Trail is connected to existing sections of the Brisbane Valley Rail Trail at Yarraman and Blackbutt, the Bicentennial National Trail at Kilkivan and the proposed Maryborough to Hervey Bay Rail Trail to create a long-distance multi-use trail network of international significance. This 600 kilometre "Great South East Trails" network would connect the internationally recognised tourist destinations in the Queensland-New South Wales border ranges, to those in the Hervey Bay and nearby Great Sandy region, including Fraser Island.

Current situation

South Burnett Regional Council, the Department of State Development, Infrastructure and Planning and the Department of Transport and Main Roads are partners in preparing this feasibility study.

Subject to future decisions by Council and depending on future funding, there is strong interest from South Burnett Regional Council in the development of the rail trail between Kingaroy and Murgon. South Burnett Regional Council is keen to build on their successful development and management of the Brisbane Valley Rail Trail from Linville to Nukku which has been a significant driver of economic development in the Blackbutt district.

Gympie Regional Council is concerned about cost of development and management of the proposed Kingaroy to Theebine Rail Trail within their area. Given these concerns, Gympie Regional Council declined the offer to be a partner to this feasibility study.

Most of the former Kingaroy to Theebine rail line infrastructure (including rail station platforms, signs, signals, ballast and bridges but excluding rail lines and sleepers) can be redeveloped for use as a rail trail. These rail assets have been purchased by the Department of State Development, Infrastructure and Planning from Queensland Rail Limited for their heritage value and for conversion to recreation trail use. These publicly-owned rail assets (Listed in Appendix #) will need to be protected from theft or damage and maintained. The remaining rail assets are being removed under a 'salvage' contract managed by Queensland Rail Limited. This salvage contract started in early 2012 and is expected to be completed in 2013.

Community consultation

Community consultation was not undertaken for this feasibility study. However, the proposal to develop this rail trail has been discussed by the affected local communities and by local and State government representatives since at least 2007. Local community support for development of the proposed Kingaroy to Theebine rail trail has not been formally tested. Future community consultation in the three directly affected local government areas and

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negotiation between these local governments and the relevant State agencies will be necessary to confirm support for development and management of the Kingaroy to Theebine Rail Trail.

Synthesis

To achieve the intended economic outcomes, sequential development of rail trail sections, providing for a mix trail uses, is proposed. These uses include half-day to full-day options for cycling, walking or horse riding, supported by hotel, motel, bed and breakfast or camping options at the start and finish of each section. It is recommended that sequential development of the rail trail proceed from Kingaroy toward Theebine with Kingaroy to Wooroolin as the first section of for conversion to rail trail.

The proposed Kingaroy to Theebine Rail Trail has the potential to generate diverse business opportunities. Cycling (both family-friendly short distance trips and longer distance touring) is expected to be the rail trail's main use. Walking will be concentrated close to, or between Kingaroy, Wondai and Murgon and the intervening smaller townships. Horse riding is expected to be focused between Goomeri, Kilkivan and Theebine. Over time, it is expected that 'side trips' or local trails will develop from the rail trail to nearby attractions and facilities.

Based on the known economic outcomes from the successful Otago Central Rail Trail in New Zealand, rail trails in Victoria and South Australia and long distance eco-tourism and adventure tourism trails in Western Australia and Tasmania, the Kingaroy to Theebine Rail Trail can deliver outcomes of the Government's *Tourism Strategy* by increasing overnight visitor expenditure in regional Queensland. Long distance recreation trails, such as the Kingaroy to Theebine Rail Trail, are "catalyst" infrastructure for regional tourism growth.

Since 2006, South Burnett Regional Council has developed and managed the Blackbutt to Linville section of the Brisbane Valley Rail Trail. This responsibility was extended to Nukku in 2010. This council has demonstrated ability to develop and manage the Kingaroy to Theebine Rail Trail within their local government area supported by funding for capital works from State Government.

Gympie Regional Council will have a key role when consideration is given to extending the Kingaroy to Theebine Rail Trail into their area. Cherbourg Aboriginal Shire Council, and the Cherbourg community, may have interests in the training and employment opportunities arising from construction and management of the rail trail, expanded or new tourism enterprises and the potential to develop a recreation trail link from the rail trail at Murgon south to Cherbourg. Both Gympie Regional Council and Cherbourg Aboriginal Shire Council should be engaged as partners in planning, investment, development and management for this rail trail.

Funding

Current

Funding of \$1 million is currently available from the Department of Transport and Main Roads for a suitable entity to develop the proposed Kingaroy to Theebine Rail Trail. No other currently available funding for development of the proposed rail trail has been identified.

Future funding options

To cover the costs of developing and managing the Kingaroy to Theebine Rail Trail, an innovative partnership approach to attract funding and investment is proposed. The components of this partnership and sources of public sector funding and options for private sector investment could include:

- Planning scheme provisions which give effect to the relevant provisions of the *Wide Bay Burnett Regional Plan 2011* (Principles 2.4.1, 2.5.1, 4.2.1 and 5.1.1; Policies 4.2.5, 4.2.6, and 5.1.4; Programs 2.4.8 and 2.5.6) by identifying the significant tourism potential of the Kingaroy to Theebine Rail Trail for the region, including opportunities for investment
- Capital works funding for construction of principal cycle networks and for development and maintenance of rail corridors by the Department of Transport and Main Roads;

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- Existing Commonwealth, State and Local government investment or funding programs aimed at the recreation, natural resource management and/or tourism sectors including:
 - grants through the *Sport and Recreation Infrastructure Program* which is administered by the Department of National Parks, Recreation Sport and Racing;
 - grants through the Local Government Grants and Subsidies Program administered by the Department of Local Government;

These programs are typically administered through service-level agreements or other contractual arrangements based on approved detailed action plans

- Tourism, community and social infrastructure offsets for major resource projects
- Private sector investments in tourism facilities and services
- Corporate sponsorships
- Philanthropic contributions

Key findings

1. Feasibility is confirmed

This analysis of the proposed Kingaroy to Theebine Rail Trail has confirmed the technical and economic feasibility for redeveloping the closed Kingaroy to Theebine railway line as a recreation trail for walking, cycling and horse riding. Those sections of the proposed rail trail through towns will concurrently be used for:

- recreational walking, cycling and horse riding
- commuter walking and cycling
- community events such as fun runs

2. Estimates of Kingaroy to Theebine Rail Trail use and associated tourist expenditure

A conservative estimate of outcomes suggests that the proposed Kingaroy to Theebine Rail Trail has the potential to:

- Attract an estimated at **50,000 trail users/visitors per year** within 10 years, expanding to **70,000 trail users/visitors per year** within 15 years
- Be a “catalyst” tourism infrastructure project which stimulates new markets and business opportunities in the South Burnett and Gympie regions
- Attract significant numbers of visitors from South East Queensland and interstate including users of nearby existing recreation trails such as the sections of the Brisbane Valley Rail Trail between Yarraman and Moore.

Tourist visitation is expected to increase as sections of the proposed Kingaroy to Theebine Rail Trail are completed and opened. Based on the outcomes from comparable rail trails, within 10 years after developing and opening the entire 130 kilometre rail trail, **50,000 trail users/year** can be expected. Assuming a low/medium expenditure scenario, the resulting estimated visitor-spend) is **\$1.5million/year**.

3. Tourism infrastructure and associated tourist markets

By attracting more tourists from several different market segments, the proposed rail trail could make a significant contribution to the tourism profile and economy of the South Burnett and Gympie regions. Increased demand for accommodation, food, beverages, transport services and guide services will generate jobs, investment and growth in towns and rural communities.

Given the forecast low/medium visitor-spend, the potential spend over 10 years is **\$15million**. However, this is expected to grow to **\$30million** after 15 years assuming the rail trail is completed, marketing campaigns mature and businesses expand to meet demand.

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The variety and capacity of existing tourism enterprises and facilities vary significantly along the Kingaroy to Theebine rail corridor. The section from Kingaroy to Murgon is well served by existing hotels, motels and other accommodation options; retail equipment providers; and food and beverage providers. However, from Goomeri to Theebine the rail corridor has a more remote rural character with few existing accommodation, camping and day use facilities or other tourism services.

Some tourists will prefer the relative remoteness of this section, while others will seek the more developed sections between Kingaroy and Murgon. The limited tourism infrastructure between Goomeri and Theebine can be addressed in the context of future business opportunities for tourism service providers. This may be significant for nearby rural landholders as there will be opportunities to augment farm incomes by providing accommodation, food, equipment hire and repair and guiding services – as has been demonstrated from rail trails and other long distance recreation trails in Victoria, South Australia, Western Australia and New Zealand.

Given the available evidence, it is reasonable to expect that development of the Kingaroy to Theebine Rail Trail will provide significant economic benefits for near-by communities from additional expenditure by residents and new expenditures by visitors with consequent local job creation and new business opportunities.

To increase these positive economic effects, integrated marketing of the KTRT with established local attractions such as the Bunya Mountains National Park and Lake Boondooma and Lake Barambah, and drive-tourism initiatives such as the “Great Bunya Drive” is needed. This also applies to ‘in transit’ visitors travelling through the South Burnett region to destinations nearby such as World Heritage listed Fraser Island or other high profile coastal locations.

4. Expected uses

Within all the towns and smaller centres through which the proposed rail trail passes, a mix of outdoor recreation-based tourism and local recreation and commuter uses is expected. Sections near each of the major townships (Kingaroy, Wondai and Murgon) are suitable for designation as part of the Department of Transport and Main Road’s *cycle networks* and can be integrated with local cycle networks.

Elsewhere, the preferred uses are likely to be a mix of horse riding, cycling and walking. Interactions between these different uses and users can be managed by design, signage and pre-visit information. In the sections of the rail trail which have sufficient demand for non-motorised commuter use, or are designated as part of a cycle network, a higher standard of trail construction than elsewhere may be justified. Planning and funding for construction of commuter cycle networks will be done by the Department of Transport and Main Roads.

5. Capital and recurrent costs

The estimated capital and recurrent costs for the Kingaroy to Theebine Rail Trail (*in 2012 dollars*) are:

- **Trail construction**
\$5-7million over 10 years (\$500-700k/year; \$38,000–54,000/km)
- **Trail and corridor maintenance**
\$2million over 10 years (\$200k/year; \$1,538/km/year)
- **Combined trail construction and corridor maintenance**
\$7-9million over 10 years (\$700k- \$900k/year)

6. Staged development

It is recommended that the Kingaroy to Theebine Rail Trail be developed sequentially in the stages outlined in Table 2. Estimated construction costs for each rail trail section are also provided in Table 2.

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Table 2: Kingaroy to Theebine Rail Trail and related trails – sections, local, governments and estimated construction costs

Section #	Local Government	Section Name	Length (km)	Trail type	Estimated construction costs (in 2012 dollars)
1	SBRC	Kingaroy to Murgon	43	rail trails	\$1.25 - 1.8 million
		Kingaroy to Wooroolin	16		\$610,000 – 860,000
		Wooroolin to Wondai	14		\$530,000 – 760,000
		Wondai to Murgon	13		\$500,000 – 700,000
2	SBRC & GRC	Murgon – Goomeri	20	rail trail	\$760,000 – 1.1 million
3	GRC	Goomeri – Kilkivan	30	rail trail	\$1.2 - 1.6 million
4	GRC	Kilkivan – Woolooga	19	rail trail	\$725,000 – 1.0 million
5	GRC	Woolooga – Miva	18	rail trail	\$680,000 - 975,000
6	GRC	Miva – Theebine	5	local roads	\$190,000 – 270,000
7	GRC	Theebine - Gunalda	7	local roads	\$260,000 – 380,000
Total					\$5 – 7 million
	SBRC & TRC	Yarraman to Nanango	21	stock routes and local roads	Not costed for this project
	SBRC & TRC	Blackbutt/Benarkin–Nanango	25	stock routes and local roads	Not costed for this project
	SBRC	Nanango – Kingaroy	25	local roads	Not costed for this project
	CASC	Murgon – Cherbourg	6	local roads	Not costed for this project

SBRC – South Burnett Regional Council

GRC

Gympie Regional Council

CASC – Cherbourg Aboriginal Shire Council

TRC

Toowoomba Regional Council

7. A catalyst tourism infrastructure project

The Kingaroy to Theebine Rail Trail is ‘catalyst’ tourism infrastructure that will stimulate market diversification and growth especially if linked to existing and proposed regional trails to create a world class 600 kilometre “Great South East Trails” network including the:

- Bicentennial National Trail at Kilkivan
- Brisbane Valley Rail Trail at Yarraman and Blackbutt via Nanango
- trails for bushwalking, horse riding, mountain bike riding, four-wheel driving and trail bike riding in national parks and state forests in the upper Brisbane River and upper Mary River catchments

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- Great Walks in the national parks of Fraser Island, Cooloolo, Sunshine Coast hinterland and Conondale Range
 - proposed Maryborough to Hervey Bay Rail Trail
 - Boonah to Ipswich Trail

8. Cost-benefit

Assessment of the economic potential of the proposed Kingaroy to Theebine Rail Trail shows a **modest cost-benefit ratio in favour of benefits**, most of which are attributed to the Kingaroy to Murgon section. Of the entire Kingaroy to Theebine Rail Trail, this section has the three largest local population centres and most of the existing tourist infrastructure – much of which has unused capacity. This section also has the highest potential for use by local residents. This assessment is based on established methodologies to predict local resident and visitor spending patterns and the investments needed to achieve the highest return.

Investment in the proposed Kingaroy to Theebine Rail Trail has the lowest economic opportunity cost of all other tourism initiatives proposed for the *South East Queensland Country Tourism Opportunity Plan 2009-2019* region because of the diversity of tourism objectives that could be met.

Feasibility Study Partners

- Department of Transport and Main Roads
- Department of State Development, Infrastructure and Planning
- South Burnett Regional Council

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Main Report

1. Introduction

This feasibility study assesses the potential benefits and costs developing the proposed Kingaroy to Theebine Rail Trail (KTRT).

In delivering this outcome, this feasibility study:

- Provides a foundation to inform future decisions on planning, construction, administration and management
- Identifies possible funding options
- Provides a basis for greater certainty for potential investors, potential project partners, and other key stakeholders including the tourism industry, local communities and potential trail users
- Identifies the need to retain the Kingaroy to Theebine rail corridor as state land to retain the option to develop the proposed KTRT in stages when funding is made available.

An important task of this feasibility study is to balance success factors to optimise the economic, social and environmental benefits for the broadest cross-section of the community.

1.1. Kingaroy to Theebine Rail Corridor history and links to major other recreation trails

The Kingaroy to Theebine rail corridor (KTRc) is 132 kilometres in length and extends from Kingaroy in the South Burnett Regional Council (SBRC) area to Theebine in the Gympie Regional Council (GRC) area. About 50 kilometres of the corridor (from Kingaroy to Manyung) is in the SBRC area and the balance is in the GRC area. Part of the rail corridor between Wondai and Murgon is located on the western boundary of the area administered by the Cherbourg Aboriginal Shire Council (CASC).

Note that 1.5 kilometres of KTRc between Theebine and intersection of Old Gympie Road and Theebine Road is retained by Queensland Rail Limited (QR) and is not available for re-development.

The KTRc is public land (otherwise known as 'State land') which is managed by the Department of Transport and Main Roads (DTMR) through a 'head' lease. Until 2009, QR operated a railway line on within the KTRc under a sub-lease issued by DTMR.

Construction of the 132 kilometre Theebine to Kingaroy rail line started at Theebine in 1895, reached Kingaroy in 1904 and Nanango in 1911. Branch (or "spur") lines were subsequently constructed from Murgon to Proston, Kingaroy to Tarong and Murgon to Windera. In 1961, the Nanango to Kingaroy line and the various branch lines were closed. In December 2009, the Department of Transport and Main Roads closed the Theebine to Kingaroy rail line as part of the Queensland Government's *Branch Line Rationalisation Initiative*.

The southern terminus of the KTRc is the former Kingaroy railway station located in the town's central business district. From there, the rail corridor runs north through the urban area to the north of the town centre, then through the rural townships and villages of Crawford, Memerambi, Wooroolin, Tingoora, Wondai, Murgon, Goomeri, Kilkivan, Woolooga, to terminate at Theebine, a small village at the junction with the main Brisbane to Cairns rail line about 25 kilometres north of Gympie. Along the way, there are several disused rail stations with few or no remaining rail structures and, consequently, minimal heritage value.

The KTRc connects diverse rural landscapes, townships, facilities and services which provide attraction and interest to locals and, potentially, visitors from outside the South Burnett and Gympie regions.

DTMR also has a 'head' lease for the rail corridor of the closed rail line from Murgon north-west through Byee and Hivesville to Proston. Over time, most of this rail corridor beyond Byee

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has been occupied by adjacent rural properties. Where this occurs, future development of a rail trail is usually severely impeded.

A short section of the former Kingaroy to Nanango rail corridor is still visible south east of central Kingaroy to Harris Road. Beyond there, the rail corridor has been incorporated into rural residential and rural properties.

In addition to these closed rail corridors, there are other public lands that could link to the KTrc. These public lands include state forests, national parks, stock routes and local government-controlled roads between Benarkin, Blackbutt, Yarraman, Kingaroy, Murgon and Cherbourg. For simplicity, these various links to the potential KTRT are hereafter referred to collectively as 'trail links'. The rail corridor from Kingaroy to Theebine and potential 'trail links' are shown in the map in Appendix A: *Proposed Kingaroy to Theebine Rail Trail*.

These potential "trail links" from Kingaroy to the partially completed Brisbane Valley Rail Trail, at both its northern terminus at Yarraman and to Blackbutt, are in good condition, reasonably well maintained and regularly used for recreation. These trail links are located on local government roads (some of which are also stock routes) which have important roles for stock feeding and transport as well as significant landscape heritage, scenic amenity and biodiversity values. These parts of the state-wide stock route network are most accessible to the urban populations in South East Queensland and therefore have significant recreation, heritage and educational value. More information about Queensland's stock routes network is available online from: <http://www.derm.qld.gov.au/land/stockroutes/index.html>

1.2 Ownership and management of the rail corridor and rail infrastructure

The KTrc is wholly owned by the Queensland Government as State (i.e. public) land. This state land corridor is currently administered through a 'head lease' held by the DTMR.

Prior to 20 January 2012, Queensland Rail Limited (QR) owned the railway infrastructure (e.g. rails, sleepers, bridges, and signs) in the KTrc. To retain the future option to redevelop the closed rail line and associated land corridor as a rail trail, the Department of State Development, Infrastructure and Planning (DSDIP; formerly the Department of Local Government and Planning – DLGP) and SBRC have worked closely with QR and DTMR to identify and secure rail infrastructure which could be re-used should a rail trail be developed in the future.

For a nominal cost, DSDIP purchased the rail infrastructure which could be redeveloped for rail trail use (e.g. some bridges, signs, signals and culverts) through a 'Sale Agreement' with QR (Attachment #?). DSDIP currently owns the rail assets listed in this Sale Agreement. Long term ownership of the assets listed in this Sale Agreement will be resolved in the context of future decisions about the development of the proposed KTRT.

QR has arranged for the removal (or 'salvage') of specified rail infrastructure (e.g. rails, sleepers, some bridges and rail spikes) which is not required for the potential rail trail from the KTrc. QR is managing the salvage operations to leave the corridor in a safe condition that will facilitate future use options, including redevelopment as a rail trail. This salvage contract started in March 2012 from near Theebine working towards Kingaroy and is due for completion at the end of 2013.

1.3 Condition of the Corridor and Rail Infrastructure

The (KTrc) has not been maintained for rail transport purposes since 2009. Based on site inspections undertaken in April and June 2012 and in 2010 and 2011, most of the rail infrastructure in the KTrc - platforms, switches, signals, signs, cuttings, embankments, rail formations and bridges (including the heritage listed Dickabram steel and timber bridge over the Mary River) - appear to be in good condition for potential redevelopment as a rail trail.

Some of the railway signage, bridges and some minor sidings have been removed. In comparison with the rail corridor on which the Brisbane Valley Rail Trail (BVRT) is located

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and the rail corridor for the proposed Bethania to Beaudesert Rail Trail, the KTrc has significantly more rail heritage infrastructure which is in good condition.

On-site inspections in April and May 2012 noted that much of the KTrc is heavily overgrown with long grass, weeds and sapling re-growth. If left un-treated, these sections may be a potential fire threat both to timber structures of rail heritage value and some neighbouring properties. Through their head lease for the KTrc, DTMR currently has the responsibility for managing fire and other natural resource management risks within the KTrc. Development of the KTRT may provide an alternative long-term basis for corridor management through which these risks could be effectively and efficiently managed.

The removal of specified rail infrastructure through QR's rail salvage contract may stimulate community interest in the rail infrastructure that is retained. Between March and June 2012, SBRC has received reports of theft of railway heritage items such as signage. In response, SBRC is securing certain items of heritage value by removal and storage with the agreement of DSDIP..

Overall, the KTrc and associated railway infrastructure is a valuable community resource. However, without active management and maintenance, heritage values will decline and corridor natural resource management risks may not be addressed.

1.4 Current availability of rail trail development funding

Funding of \$1 million is currently available from DTMR for a suitable entity to develop the proposed KTRT.

No other currently available funding for development of the proposed KTRT has been identified.

1.5 Community impacts of the proposed Kingaroy to Theebine Rail Trail

A project such as this does not solely focus on the aspirations of the communities near the KTrc. The approach taken in this study considers the local community in terms of three categories:

- potential rail trail users
- potential providers of tourism and recreation services (e.g. local businesses)
- adjoining landholders

The study acknowledges the potential for the proposed KTRT to attract visitors from other parts of the Wide Bay Burnett region, South East Queensland, other Australian states and territories and other countries.

2. Rail Trails Explained

2.1 Introduction

A *rail trail* is a closed railway line which has been converted to a recreation trail - usually for non-motorised activities such as walking, cycling and horse riding. In and near urban areas, rail trails are also redeveloped for walking and cycling commuters, wheel chair access and other forms of (physically) "active" (non-motorised) transport.

Typically, any rail infrastructure which cannot be modified for recreation trail purposes is removed and the remaining structures are converted for the intended recreational uses. Rail trails do not include *historic railways* which operate superseded railway engines and rolling stock on otherwise unused rail lines.

More than 40 rail trails have been developed in Australia. Most of these are in Victoria. South Australia and Western Australia also have successful rail trails. In Queensland, the State Government has partially completed the Brisbane Valley Rail Trail (from Ipswich to Yarraman). Currently, there are at least three rail trails in New South Wales with others under consideration for development.

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2.2 Requirements for successful rail trail development

Each rail trail is different, however the characteristics shared by the successful rail trails are:

- accessibility to large potential user populations (local residents and tourists);
- existing, or easily developed tourism businesses along the rail trail - places to eat, drink, explore and stay;
- heritage infrastructure (e.g. historic stations, bridges, tunnels, sheds, sidings, platforms, switches, signals, and mile posts) in situ;
- location in interesting natural and/or cultural landscapes, adjoining land uses supported by special attractions;
- connection/s into and through major towns and/or smaller settlements;
- opportunities for short, medium and long rides and walks on the main trail
- effective signage, maps and other marketing collateral which is easily available both on the trail and elsewhere
- effective management, maintenance and marketing regimes
- strong support from local communities, recreational users and tourism organisations
- support from adjacent landholders and relevant local and state government agencies
- effective long-term partnerships between the tourism industry, local governments, relevant state agencies, adjacent landholders, community-based volunteer support groups and specific activity interest groups (e.g. horse riders and cyclists)

In addition, rail trails have particular features which differentiate them from other recreation trails:

- comparatively gentle gradients and sweeping bends so high levels of physical fitness and skills are not required
- long sight lines
- motor-vehicle-free (except for authorised management and emergency services vehicles) which results in minimal interaction with fast-moving motor vehicle traffic
- suitable for non-motorised uses (e.g. cycling, walking, and horse riding – preferably with a separate dirt path for horses paralleling a hard-surfaced trail on the rail formation for walkers and cyclists
- can be constructed to standards suitable for people on wheel-chairs and mobility scooters

The proposed KTRT has all these characteristics.

2.3 Rail trails in Queensland

In Queensland, rails trails planning, development and management occur through partnerships between the State Government, local governments and community groups. The processes and institutional arrangements for the development and management of rail trails in Queensland are being actively negotiated and developed between these parties.

In July 2012, the longest rail trail development in Queensland is the partially completed the 161 km Brisbane Valley Rail Trail from Wulkuraka (west Ipswich) to Yarraman. This rail trail project is redeveloping the Brisbane Valley rail corridor to provide for walking, cycling and horse riding, to serve both local communities and the population of South East Queensland. In July 2012, five sections of the BVRT, totalling 108 km, were constructed.

There are also proposals for new rail trails in Queensland. These proposals include the Atherton Tablelands; Hervey Bay to Maryborough; Bethania to Beaudesert; and Yeppoon to Rockhampton.

2.4 Rail trails elsewhere in Australia

An overview of the history of rail trails in Australia and elsewhere is provided in the *Atherton Tablelands Rail Trails Feasibility Study Final Report May 2008* prepared for the Queensland Department of Transport and Main Roads and the Tablelands Regional Council by Mike Halliburton and Associates and Trans Plan Pty Ltd.

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Additional information is available online from the Rail Trails Australia¹ website (<http://www.railtrails.org.au/>).

2.5 How rail trails operate in Australia

There are differences in the way rail trails operate, primarily due to differing laws and administrative arrangements in each of Australia's states and territories.

The *Atherton Tablelands Rail Trails Feasibility Study Final Report May 2008* includes an overview of rail trail planning and management in Australia (pages 29 - 36).

While legislative, policy, planning and management regimes differ in each of Australia's states and territories many rail trails across Australia have some common features. Successful rail trail development characteristics were discussed in Section 2.2. Examples of characteristics of successful rail trail management include:

- Most successful rail trails have legally constituted management committees, with many (but not all) of these management committees supported by volunteer groups of trail users, local residents and local businesses.
- Community involvement in positions of 'power' (e.g. on a management committee) is critical to community buy-in;
- In Victoria, rail trail committees have organisational structures, powers and responsibilities specified in laws and policy guidelines;
- All rail trails use public land – mostly State Government owned former rail corridors and public roads. In addition, where necessary for continuity and/or safety, legal agreements to cross private property have been negotiated;
- No access fees - primarily because fee collection is usually not cost effective;
- Where the land in closed rail corridors is retained by the state/territory government, licenses (i.e. limited and specific access and use rights) may be issued where appropriate. These can generate income for trail management, meet the reasonable needs of adjoining landholders on-side and provide for licensees to maintain specified trail sectors and/or infrastructure;
- Some trails have other non-government funding mechanisms (e.g. fees for commercial operators and corporate sponsorships) with those funds controlled by a legally constituted not-for-profit organisation rather than local or state governments.

¹ Rail Trails Australia is a not-for-profit non-government organisation which promotes rail trail development in Australia

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2.6 Key Findings

Key findings

1. *Feasibility is confirmed*

This analysis of the proposed Kingaroy to Theebine Rail Trail has confirmed the technical and economic feasibility for redeveloping the closed Kingaroy to Theebine railway line as a recreation trail for walking, cycling and horse riding. Those sections of the proposed rail trail through towns will concurrently be used for:

- recreational walking, cycling and horse riding
- commuter walking and cycling
- community events such as fun runs

2. *Estimates of Kingaroy to Theebine Rail Trail use and associated tourist expenditure*

A conservative estimate of outcomes suggests that the proposed Kingaroy to Theebine Rail Trail has the potential to:

- Attract an estimated at **50,000 trail users/visitors per year** within 10 years, expanding to **70,000 trail users/visitors per year** within 15 years
- Be a “catalyst” tourism infrastructure project which stimulates new markets and business opportunities in the South Burnett and Gympie regions
- Attract significant numbers of visitors from South East Queensland and interstate including users of nearby existing recreation trails such as the sections of the Brisbane Valley Rail Trail between Yarraman and Moore.

Tourist visitation is expected to increase as sections of the proposed Kingaroy to Theebine Rail Trail are completed and opened. Based on the outcomes from comparable rail trails, within 10 years after developing and opening the entire 130 kilometre rail trail, **50,000 trail users/year** can be expected. Assuming a low/medium expenditure scenario, the resulting estimated visitor-spend) is **\$1.5million/year**.

3. *Tourism infrastructure and associated tourist markets*

By attracting more tourists from several different market segments, the proposed rail trail could make a significant contribution to the tourism profile and economy of the South Burnett and Gympie regions. Increased demand for accommodation, food, beverages, transport services and guide services will generate jobs, investment and growth in towns and rural communities.

Given the forecast low/medium visitor-spend, the potential spend over 10 years is **\$15million**. However, this is expected to grow to **\$30million** after 15 years assuming the rail trail is completed, marketing campaigns mature and businesses expand to meet demand.

The variety and capacity of existing tourism enterprises and facilities vary significantly along the Kingaroy to Theebine rail corridor. The section from Kingaroy to Murgon is well served by existing hotels, motels and other accommodation options; retail equipment providers; and food and beverage providers. However, from Goomeri to Theebine the rail corridor has a more remote rural character with few existing accommodation, camping and day use facilities or other tourism services.

Some tourists will prefer the relative remoteness of this section, while others will seek the more developed sections between Kingaroy and Murgon. The limited tourism infrastructure between Goomeri and Theebine can be addressed in the context of future business opportunities for tourism service providers. This may be significant for nearby rural landholders as there will be opportunities to augment farm incomes by providing accommodation, food, equipment hire and repair and guiding services – as has been demonstrated from rail trails and other long distance recreation trails in Victoria, South Australia, Western Australia and New Zealand.

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Given the available evidence, it is reasonable to expect that development of the Kingaroy to Theebine Rail Trail will provide significant economic benefits for near-by communities from additional expenditure by residents and new expenditures by visitors with consequent local job creation and new business opportunities.

To increase these positive economic effects, integrated marketing of the KTRT with established local attractions such as the Bunya Mountains National Park and Lake Boondooma and Lake Barambah, and drive-tourism initiatives such as the “Great Bunya Drive” is needed. This also applies to ‘in transit’ visitors travelling through the South Burnett region to destinations nearby such as World Heritage listed Fraser Island or other high profile coastal locations.

4. Expected uses

Within all the towns and smaller centres through which the proposed rail trail passes, a mix of outdoor recreation-based tourism and local recreation and commuter uses is expected. Sections near each of the major townships (Kingaroy, Wondai and Murgon) are suitable for designation as part of the Department of Transport and Main Road’s *cycle networks* and can be integrated with local cycle networks.

Elsewhere, the preferred uses are likely to be a mix of horse riding, cycling and walking. Interactions between these different uses and users can be managed by design, signage and pre-visit information. In the sections of the rail trail which have sufficient demand for non-motorised commuter use, or are designated as part of a cycle network, a higher standard of trail construction than elsewhere may be justified. Planning and funding for construction of commuter cycle networks will be done by the Department of Transport and Main Roads.

5. Capital and recurrent costs

The estimated capital and recurrent costs for the Kingaroy to Theebine Rail Trail (*in 2012 dollars*) are:

- **Trail construction**
\$5-7million over 10 years (\$500-700k/year; \$38,000–54,000/km)
- **Trail and corridor maintenance**
\$2million over 10 years (\$200k/year; \$1,538/km/year)
- **Combined trail construction and corridor maintenance**
\$7-9million over 10 years (\$700k- \$900k/year)

6. Staged development

It is recommended that the Kingaroy to Theebine Rail Trail be developed sequentially in the stages outlined in Table 2. Estimated construction costs for each rail trail section are also provided in Table 2.

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Table 2: Kingaroy to Theebine Rail Trail and related trails – sections, local, governments and estimated construction costs

Section #	Local Government	Section Name	Length (km)	Trail type	Estimated construction costs (in 2012 dollars)
1	SBRC	Kingaroy to Murgon	43	rail trails	\$1.25 - 1.8 million
		Kingaroy to Wooroolin	16		\$610,000 – 860,000
		Wooroolin to Wondai	14		\$530,000 – 760,000
		Wondai to Murgon	13		\$500,000 – 700,000
2	SBRC & GRC	Murgon – Goomeri	20	rail trail	\$760,000 – 1.1 million
3	GRC	Goomeri – Kilkivan	30	rail trail	\$1.2 - 1.6 million
4	GRC	Kilkivan – Woolooga	19	rail trail	\$725,000 – 1.0 million
5	GRC	Woolooga – Miva	18	rail trail	\$680,000 - 975,000
6	GRC	Miva – Theebine	5	local roads	\$190,000 – 270,000
7	GRC	Theebine - Gunalda	7	local roads	\$260,000 – 380,000
Total					\$5 – 7 million
	SBRC & TRC	Yarraman to Nanango	21	stock routes and local roads	Not costed for this project
	SBRC & TRC	Blackbutt/Benarkin–Nanango	25	stock routes and local roads	Not costed for this project
	SBRC	Nanango – Kingaroy	25	local roads	Not costed for this project
	CASC	Murgon – Cherbourg	6	local roads	Not costed for this project

SBRC – South Burnett Regional Council

GRC

Gympie Regional Council

CASC – Cherbourg Aboriginal Shire Council

TRC

Toowoomba Regional Council

7. A catalyst tourism infrastructure project

The Kingaroy to Theebine Rail Trail is ‘catalyst’ tourism infrastructure that will stimulate market diversification and growth especially if linked to existing and proposed regional trails to create a world class 600 kilometre “Great South East Trails” network including the:

- Bicentennial National Trail at Kilkivan
- Brisbane Valley Rail Trail at Yarraman and Blackbutt via Nanango
- trails for bushwalking, horse riding, mountain bike riding, four-wheel driving and trail bike riding in national parks and state forests in the upper Brisbane River and upper Mary River catchments

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- Great Walks in the national parks of Fraser Island, Cooloolo, Sunshine Coast hinterland and Conondale Range
- proposed Maryborough to Hervey Bay Rail Trail
- Boonah to Ipswich Trail

8. Cost-benefit

Assessment of the economic potential of the proposed Kingaroy to Theebine Rail Trail shows a **modest cost-benefit ratio in favour of benefits**, most of which are attributed to the Kingaroy to Murgon section. Of the entire Kingaroy to Theebine Rail Trail, this section has the three largest local population centres and most of the existing tourist infrastructure – much of which has unused capacity. This section also has the highest potential for use by local residents. This assessment is based on established methodologies to predict local resident and visitor spending patterns and the investments needed to achieve the highest return.

Investment in the proposed Kingaroy to Theebine Rail Trail has the lowest economic opportunity cost of all other tourism initiatives proposed for the *South East Queensland Country Tourism Opportunity Plan 2009-2019* region because of the diversity of tourism objectives that could be met.

Feasibility Study Partners

- Department of Transport and Main Roads
- Department of State Development, Infrastructure and Planning
- South Burnett Regional Council

3. Benefits of Rail Trails

Converting disused rail corridor land into rail trails makes good sense. Most rail trails have a gentle gradient which allows and encourages use by most people regardless of age or physical condition. Shared use by motor vehicles is a major negative factor for “non-motorised” recreation trail users. The main issues are safety and loss of amenity. Most rail trails circumvent this by only allowing access for authorised management and emergency services vehicles. Further, rail trails often traverse landscapes where there is no other public access and contain historic bridges and other structures. With minor work, most rail formations can be modified to produce a broad, flat, firm trail surface.

Recreation trails provide significant benefits, both to trail users, and the host communities. The *Recreational Trails Strategy for South Australia 2002 – 2010* (South Australia Office of Sport and Recreation, 2002) provides a summary of benefits (including social health, physical fitness, environmental protection, cultural preservation and economic) from the experiences offered by recreation trails.

3.1 Economic benefits

There is much evidence in Australia, and from other countries, which suggests that rail trails can contribute significantly to the (often rural) communities in which the rail trails are located.

Rail trail walkers, cyclists and horse riders spend money in communities along, and near, the trails (as do the users of other types of recreation trails). Expenditures that result from rail trail development and subsequent use include:

- Accommodation (e.g. hotels, motels, bed and breakfasts, farm stays, caravan parks and camping areas)
- Food and beverages
- Transport to, from and along the rail trail
- Equipment purchase, hire and repair
- Guiding services
- Entertainment (via events, festivals and hotels)

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These expenditures support existing local businesses and provide opportunities for new enterprises. Also, participation in trail activities (walking, cycling and horse riding) by local residents improves community health which, in turn, reduces health expenditure.

3.2 Some examples of economic benefits from rail trails

Detailed consideration needs to be given to the potential economic benefits accruing from the proposed development of the Kingaroy to Theebine Rail Trail. This section provides examples of economic benefits that resulted from the development of rail trails and other long distance recreation trails.

Mundaring Shire – The Economic Impacts of a Local Trail Network

Titled “Attitudes of Users towards the Mundaring Recreation Trails”, this study generated data relating to both gross usage levels for trails in the Mundaring Shire (on the outskirts of Perth) and the economic benefits flowing from that usage. It is worth noting that the Mundaring trail network is located approximately 1 hour from central Perth, a much shorter travel time and distance from central Brisbane to the KTrc.

The Mundaring study covered several trails in the Shire including the Railway Reserves Heritage Trail, a rail trail which is part of the overall network. It is reasonable to assume, given traditional trail usage patterns in the area, that a substantial majority of all trail users were accessing some part of the rail trail.

Key outcomes from this study that are relevant to this project include:

- 42% of local residents surveyed had used the trails in the 4 week survey period. Only 23% had either not used the trails or were not aware of them at all;
- Residents who lived adjacent to a trail were no less satisfied with the proximity of trails to private property than were those living further from them;
- The total number of people using the Mundaring trails was 209,488 per year, with 20,605 of these being Mundaring residents;
- The total number of trips on the trails studied was a staggering 2.454 million visits annually, with local residents accounting for 63% of these;
- Of all those visitors from beyond the Shire who had come to use the trails, 81% had come specifically to do so, showing the attraction of the trails;
- Trail users travelling from beyond the Shire spent an average of \$11.43 per visit in the Shire. Injecting a total of \$10.39 million into the local economy;
- The same trail users travelling from beyond the Shire spent a further \$12.28 outside the Shire, injecting another \$11.16 million into the State economy;
- 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; and
- 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.

The Mundaring study showed that trail users – both locals and visitors – spent more outside the Shire than they did in it. While some \$12.61 million was spent in the Shire, a total of \$15.20 million was spent elsewhere, to the broader benefit of the State economy (Jessop and Bruce, 2001).

Using the accepted national average job creation figure for the tourism industry of 13 jobs per million dollars of expenditure, the local trail network generates 163 full-time jobs in Mundaring Shire (Jessop and Bruce, 2001). These figures indicate that trail use has become a mainstream economic activity in the last ten years.

Overnight Visitors – another economic opportunity

Many local communities and businesses near the 1,000 km Bibbulmun Track from Perth to Albany in Western Australia recognise the track as a major economic driver (<http://www.bibbulmuntrack.org.au/trip-planner/accommodation-services/>).

An enterprise based on the Bibbulmun Track – *Bibbulmun Walking Breaks* - provides for people who enjoy walking but do not want to carry a heavy pack or camp overnight

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(<http://www.bibbulmuntrack.org.au/walk-the-track/bibbulmun-walking-breaks/>). In 2002, Bibbulmun Walking Breaks won a national award for innovation in travel in the Jaguar Awards for Excellence and has contributed to the \$39 million annual expenditure by Bibbulmun Track users. Good marketing of such a package can mean an increase in overnight stays and total expenditure per person.

South Australia – The Riesling Trail

The market research company, Market Equity, completed a study in 2004, of the economic impact of the Riesling Trail. These figures provide economic data on the impact of a well managed and promoted trail. Key findings of the Market Equity report (2004) are:

- 46% of trail users from outside the region came primarily for the Riesling Trail – a raw number of over 5,000 visitors.
- Trail users are spending \$215.82/person/visit in the Clare Valley. The net effect of this expenditure is that visitors who come to the Clare Valley primarily for the trail (46% of users) are estimated to spend \$1.08 million/year; and
- The average length of stay is 2.2 days (giving a daily expenditure of \$98.10).

The direct economic benefit is a very important impact of the Riesling Trail. There are also unquantifiable impacts on business confidence and operation. Qualitative research undertaken by Market Equity with local business operators confirms the impact of the trail in the psyche of these businesses.

Key findings were:

- The trail contributes significantly to economic activity in the region
- The trail is seen to attract a variety of visitor types to the region; visitors have both wine and 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
- 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.

The Riesling Trail Management Committee is strongly of the view that the trail adds to the economy of the Clare Valley and the well-being of those who live there.

Rail Trails in Victoria – Economic Impacts

A 2003 study titled “*An Economic Analysis of Rail Trails in Victoria, Australia*” by Dr Sue Beeton from La Trobe University in Victoria investigated user activity and expenditure patterns on three rail trails in Victoria, each in a different geographical and social landscape. One is a near-urban trail (the Lilydale to Warburton Rail Trail), within one hour of the Melbourne central business district. The other two (the Murray to the Mountains Rail Trail in northern Victoria and the East Gippsland Rail Trail) are approximately three hours drive time from Melbourne.

The study indicates that 89% of the trail users who responded to the questionnaire were cyclists. The net benefit quoted is an average of \$51.10 for every visitor-day on one of the three rail trails.

Of particular interest for the KTRT feasibility study is the expenditure profile for the Lilydale Warburton Rail Trail which is located within 60 minutes drive time of Melbourne’s CBD and is also accessible from the urban train system. This trail has a large number of day trippers - 100,000 of the total 105,000 visitors/year (Victorian Trails Coordinating Committee 2005).

The average **combined** expenditure of day trippers and those who stay at least one night is \$103.92/person/day. Of particular importance was that day trippers are spending an average of \$44.63/day – of which 90% is spent on food and beverage, and 4% is spent on transport. If users stay overnight, their expenditure increases. On Day 2, Lilydale Warburton Rail Trail users spend \$107.14/day and on Day 3, they spend \$160/day (page 17, Beeton, S. 2003. “*An Economic Analysis of Rail Trails in Victoria, Australia*”)

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The expenditure data from users of the Murray to the Mountains Rail Trail and the East Gippsland Rail Trail, show that similar economic sectors benefited from expenditure - mostly in the accommodation, food and beverage sectors. There was also significant expenditure on cycling equipment and repairs by users of these two trails – which suggests potential new business opportunities.

In 2006, Dr Beeton published a report on expenditures by cyclists on the Murray to the Mountains Rail Trail in Victoria over Easter 2006. The title of this report is “*Regional communities and cycling – the case of the Murray to the Mountains Rail Trail in Victoria, Australia*” (<http://www.bicyclenetwork.com.au/media/vanilla/file/rail-trails%202006.pdf>).

This study found that the average expenditure by cyclists on the Murray to the Mountains Rail Trail over Easter 2006 was \$258 per day “made up of \$147 for food and drinks, \$47 for transport, \$37 on miscellaneous expenses and \$27 for accommodation”. A similar study of expenditures by cyclists on the Murray to the Mountains Rail Trail over Easter 2009 found that their average expenditure was \$244 per day - \$123 for food and drinks, \$18 for transport, \$6.50 on cycling, \$6.50 on souvenirs, \$38 on “other” expenses and \$52 for accommodation

The studies demonstrate that there are significant economic benefits for host communities from the development of rail trails and similar long-distance recreation trails in Australia.

Other studies from the USA and Canada show a similar range of daily expenditure by trail users. By comparison, the figures generated in Mundaring Shire (WA) may be at the low end of the average daily expenditure spectrum.

New Zealand – The Otago Central Rail Trail – Impacts on the Business Environment

The Otago Central Rail Trail is an iconic rail trail in the Otago region of New Zealand's South Island. Opened in 2000, it is a 150 kilometre long trail through rolling farmland. It has 68 bridges and was converted to a rail trail at a cost of \$850,000. It is a one hour drive from Dunedin (population 110,000) and a three and a half hour drive from Christchurch (population 331,000). In 2004, 5,000 people travelled along the entire trail, with some 100,000 people movements along the trail in total (some of these are repeat use by local residents). Cyclists undertaking the complete journey often do so in 3 days, while walkers take 5 days (Otago Central Rail Trail Trust, 2005).

A survey was carried out focussing on businesses immediately adjacent to a section of the rail trail (Middlemarch to Clyde) and also included businesses in Dunedin and other places offering ancillary trail services. The key findings were:

- 64% of accommodation providers in the vicinity of the rail trail prior to the trail's opening now attribute greater than 20% of their turnover to the trail;
- 80% of accommodation providers in the vicinity of the rail trail set up since the trail's opening attribute greater than 20% of their turnover to the trail. 53% of these attribute more than 60% of their turnover to the trail;
- The rail trail was the key factor in almost 25% of new businesses opening or existing businesses changing hands in the vicinity of the trail since February 2000; and
- 82.5% of survey respondents believe the trail has had a positive economic impact on their communities with 43% rating the impact as major.

These figures are similar to those detailed above regarding the business and community impacts of the Riesling Trail.

The economic impacts of the rail trail are also explored – the average expenditure per person per day was \$NZ 92.80 with the average length of stay of 3.8 days. Over 200 full-time and part-time jobs have been created since the official opening of this rail trail in 2000. The survey also found that respondents generally believed that the trail had brought greater community pride and improved services and facilities to the towns along the route.

The United States of America

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Significant data on the economic benefits of trails is also available from the USA. Some relevant expenditure figures from the USA include:

- Visitors to Ohio's Little Miami Scenic Trail spend an average of \$US13.54 (\$A17.15) per visit on food alone;
- A study of the Oil Creek Bike Trail (Penn State University, 1992) in Pennsylvania revealed average visitor spending of \$US25.85 (\$A32.70) per day; and
- Users spent an average of \$US9.21 (\$A11.65), \$US11.02 (\$A14.00), and \$US3.97 (\$A5.00) per person per day as a result of their trail visits to the Heritage, St. Marks, and Lafayette/Moraga Trails respectively, (National Pedestrian and Bicycle Clearinghouse).
- in south-western Wisconsin, the 32 mile Elroy Sparta Trail generates more than \$1.25 million for the small towns of Elroy and Sparta, by attracting visitors from all over America's mid-west (<http://www.railstotrails.org/index.html>).

3.3 Comments on economic benefits

Given the available evidence, it is reasonable to expect that development of the KTRT will provide significant economic benefits for near-by communities from additional expenditure by residents and new expenditures by visitors with consequent local job creation and new business opportunities.

To increase these positive economic effects, integrated marketing of the KTRT with established local attractions such as the Bunya Mountains National Park, Lake Boondooma and Lake Barambah, and drive-tourism initiatives such as the "Great Bunya Drive" is needed. Marketing should also target visitors travelling through the South Burnett region to high profile coastal destinations such as Hervey Bay, Fraser Island, Cooloola and Noosa.

3.4 Social and physical health benefits

In addition to the economic benefits outlined above, there may be significant health and wellness benefits to local individuals and communities from the proposed development of the KTRT. The key factor is better safety for walkers, cyclists and horse riders. This results from the physical separation of the rail trail from road networks providing a safer recreation trail which is also more attractive.

The benefits of a safe place for pedestrian and bicycle commuters (where the proposed rail trail is close to, or in, townships) and for recreational walkers, cyclists and horse riders – especially children – are significant. Participation in physical activities (including walking, cycling and horse riding) helps to protect people from the major sedentary lifestyle diseases including obesity and diabetes. There are savings to local governments, local communities and the State and Federal Governments from improved health, because people are more physically active. Savings on health expenditure are likely to exceed the direct economic benefits of tourism estimated elsewhere in this report.

A focus on "wellness", rather than illness, emphasises preventive measures which are dependent on infrastructure which promotes active and healthy lifestyles (e.g. recreation trails). Given that the climates of the South East Queensland and Wide Bay Burnett regions encourage outdoor activity, the proposed KTRT is a better value health investment than indoor facilities such as gyms.

Examples of social and physical health benefits include:

- Social and physical health benefits can accrue to individuals and to the community. A study from Norway (Institute of Transport Economics, 2002) found that a physically inactive person who starts to walk or cycle to work instead of using a car gives an economic benefit to society of between \$5,000 and \$6,795/year. A physically active person who starts to walk or cycle to work instead of using a car gives an economic benefit to society of between \$850 and \$2,550/year;

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- In 2009 (for the tenth consecutive year), more new bicycles than new cars were sold in Australia². Most Australian households have at least one bicycle, and from 2001 to 2006 cycle commuting increased 28 per cent (Australian Bicycle Council);
- Provision of cycling infrastructure which is physically separated from the road network reduces the chances of injuries and fatalities for cyclists. Whilst it is very difficult to put a financial value on a human life, estimates of this can inform decisions about the development of recreation trails separated from the road network. Potter, Forbes and Aisbett (2003), have calculated the value of a statistical life year at \$46,000 (for an amortised value of \$1.1 million per life);
- There are significant financial benefits for people who choose cycling over other forms of transport (notably a second car). Transport costs represent 15.5% of household expenditure, second only to food as a percentage of household expenditure. Cycling for commuter purposes can avoid the need for a second car, saving between \$5,000 and \$16,000/year. Provision of a safe cycle option for commuting purposes may significantly reduce or completely obviate the need for a second car in a household. The House of Representatives Standing Committee on Environment and Heritage found that, if a family traded in one car for bicycles, this would equate to \$750,000 in superannuation over the main earner's lifetime;
- Cycling just 10 kilometres each way to work each day saves about \$770 in transport costs and 1.3 tonnes of greenhouse gas emissions per year (Australian Bicycle Council);
- Cycling and walking as recreation activities can be cheaper than alternative forms of exercise such as gym classes (though the initial entry costs of cycling may be higher);
- Cycle commuting has the potential to be a major use of sections of the KTRT in more densely populated areas. This is particularly the case for sections in each of the 'urban' centres; Yarraman, Nanango, Kingaroy, Wondai, Murgon, but also for Goomeri, Kilkivan and along the trail link to Cherbourg.
- Future population growth in Kingaroy (the major activity centre and the largest urban population in the South Burnett region) is a key potential commuter market. The area is planned to support approximately 3,500 additional dwellings (accommodating more than 8,000 additional residents). The Kingaroy to Theebine non-rail corridor links Kingaroy to a three township cluster consisting of Wondai, Murgon (the second largest population centre within the SBRC area) and Cherbourg. If the Kingaroy to Theebine non-rail corridor is retained in public ownership, it provides the best opportunity for developing a non-motorised commuter link which is separated from the road network between the two largest settlements - Kingaroy and Murgon.
- There is less potential for commuter cycling along the KTRT from Murgon north to the at Goomeri and Kilkivan and beyond given smaller and more dispersed populations. North of Murgon, there is not enough potential demand to support development of the rail corridor for commuter cycling purposes.
- The opportunity for local schoolchildren to ride bikes on a safe off-road facility is a sound use of community resources. Most of the primary and secondary schools in the towns and villages along the rail corridor have easy access to the rail corridor via local streets. The total number of school students who have easy access (i.e. within 3 km) of the rail corridor in June 2012 is estimated to be between 2000 and 3000. Based on experience elsewhere, if the sections of the rail corridor identified as most suitable were prepared for cycle and pedestrian commuting, at least 20% of the students (400-600) are likely to use the corridor to get to and from school.

² Australian Bicycle Council (2010) *National Cycling Strategy 2011-2016* www.austroads.com.au/abc/national-cycling-strategy

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Development of the proposed KTTR could provide a safe corridor for the DTMR's *Safe Walking and Pedalling Program* (SWAPP) which is aimed at encouraging school students to walk or cycle to and from school.

In addition to commuting to and from schools, a redeveloped rail corridor can provide safe places for environmental and outdoor education programs in outdoor learning settings.

- Establishing 'active transport' behaviour (walking and cycling), has proven benefits in establishing lifelong habits and attitudes, promoting a lifestyle that is less car-dependant, and 'growing' a cycling and walking culture. Most urban communities in South East Queensland already enjoy high quality cycle networks. However, comparable facilities are deficient in the South Burnett and Gympie regions. The proposed rail trail would help to meet this need. Because the proposed KTTR links several towns, it could provide a suitable alignment for a principal cycle network and/or a shared pathway for cycling, walking and horse riding.
- Regular use of a rail trail section close to home or school establishes local community 'ownership' of the facility and may help to achieve stronger commitment to trail management and contribute to enhanced community pride and cohesion.
- The active use of trails allows people to directly experience and appreciate local landscapes. In turn, this encourages inter-generational transfer by trail users sharing stories about the past, present and future.

4. Kingaroy to Theebine Rail Corridor Uses

The range of potential future uses of the closed rail corridor between Kingaroy and Theebine is a significant consideration for this feasibility study.

4.1 Current uses and land banking

The head lessee (effectively the controlling manager) for the KTRC is DTMR. DTMR advises that redevelopment of KTRC for rail or road transport is unlikely in the foreseeable future.

However, it is worth noting that the proposed development of the KTTR within this closed rail corridor would not necessarily preclude future development of all or some sections of, the corridor for rail or road transport, water or gas pipelines, electricity powerlines, fibre-optic cables.

Most of the former Kingaroy to Theebine rail line infrastructure (including some rail station platforms, signs, signals and bridges but excluding rail lines and sleepers) is in good condition for redevelopment as a rail trail. The rail assets which have heritage value and/or can be converted for recreation trail uses have been secured by a "sale agreement" between QR and DSDIP. These publicly-owned rail assets (Listed in Appendix #) will need to be protected from theft or damage and maintained.

Rail assets which are not secured by this sale agreement (mainly steel rails, sleepers and some bridges and other structures not required for the proposed rail trail) are being removed under a 'salvage' contract managed by QR.

Some licenses have issued by DTMR (acting within its powers as the head lessee) for purposes such as moving stock and/or farm vehicles across or along the closed rail corridor.

4.2 Corridor use options

Five potential future options for the closed railway corridor between Kingaroy and Theebine have been identified for this study. Each of these options is assessed as follows:

1. Do nothing (keep as is)

One option for the railway corridor is to 'do nothing' - that is, to leave the railway corridor in its current condition with minimal management by DTMR. This is the current situation.

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Advantages

- Adjoining landowners are not affected by the potential for conversion of the corridor into a recreation trail; and
- Long term 'land banking' of railway corridor (for future transport system, or re-instatement of railway) is maintained.

Disadvantages

- Current problems of unmanaged vegetation, rubbish dumping, fire hazards, etc, are not managed; and
- No development and use of a potentially significant and safe non-road corridor for recreation and commuter uses.

2. Retain the corridor for future use for transport

Retaining the corridor for future redevelopment for motorised transport use - possibly including for public transport.

Advantages

- Long term 'land banking' of the railway corridor for future road transport or re-instatement of railway is maintained.

Disadvantages

- Current problems of overgrown vegetation, rubbish dumping, fire hazard, etc, are not managed;
- Community loses the opportunity to develop and use a potentially significant and safe non-road corridor for recreation and commuter uses;

Note that use of the corridor as a recreation trail does not prohibit the option of future re-development for road or rail transport purposes. The existing highway network can be significantly upgraded – generally without a significant risk of severing the Kingaroy and Theebine rail corridor. DTMR has advised that modern railway engines and rolling stock cannot use much of the existing closed rail corridor and associated infrastructure. A substantially new rail corridor would have to be secured and developed.

3. Sell corridor land to neighbours

Another option for the closed railway corridor is to sell the land to the adjoining landholders.

Advantages

- Adjoining landowners have the option to acquire and consolidate any sections of the current closed rail corridor which are adjacent to their properties into those properties. This removes any potential for 'disruption' of property management caused by future use of the closed rail corridor; and
- Current problems of overgrown vegetation, rubbish dumping, fire hazard, etc, are managed by the new landowners.

Disadvantages

- Community loses the opportunity to develop a regionally significant tourism infrastructure catalyst project;
- Long term 'land banking' of the closed rail corridor for future re-development of road or rail transport is lost;
- Not all landholders will want to, or be able to afford to, purchase the sections of the currently closed rail corridor which are adjacent to their properties;
- Local commuters lose opportunities for safe travel and building of social capital.

DTMR (the current head lessee) has advised that the closed rail will be kept as a transport corridor rather than being sold.

4. Re-establish a tourist/railway heritage train on the corridor

The potential use of the corridor for a tourist train (similar to the existing 'Gympie Rattler' historic railway in the Mary Valley south of Gympie) has been raised in internet forums.

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Advantages

- Attracts tourists to the South Burnett region;
- Long term 'land banking' of railway corridor (for future transport system, or re-instatement of railway) is maintained; and
- Some of the current problems of overgrown vegetation, rubbish dumping, fire hazard, etc may be able to be addressed through corridor management by the operator of the historic railway.

Disadvantages

- Community loses the opportunity to develop a regionally significant non-motorised tourism trail in their area; and
- Financial viability of historic railways is questionable – especially where operating over long distances. The heavily subsidised Gympie Rattler historic railway would compete in the same 'market'.

Note that this option is effectively closed by the current salvage contract managed by QR to remove the rail lines, sleepers, bridges and other nominated rail infrastructure which is not secured in the sale agreement between DSDIP and QR (See Section 1.2 above).

5. Convert to a rail trail

The closed rail corridor between Kingaroy and Theebine can be redeveloped as a multiple-use, non-motorised recreation trail – i.e. a 'rail trail' for walking, cycling and horse riding.

Advantages

- Communities on and near the KTRC, will benefit from development of regionally (and possibly nationally) significant recreation and commuter infrastructure;
- Current KTRC problems (e.g. regrowth, weeds, rubbish dumping and fire hazard) can be better managed;
- Long term 'land banking' option – re-development of the KTRC as a rail trail also retains the option to redevelop the corridor for road or rail transport, if required, in the future;
- Can be developed in stages as and when funding is made available; and
- Attracts tourists to the South Burnett region thus providing opportunities to grow and diversify the region's economy.

Disadvantages

- Concerns of adjoining landholders regarding the conversion of the corridor into a rail trail (Note: *These issues can be successfully addressed through consultation, planning, design, construction and management as is demonstrated with the Brisbane Valley Rail Trail between Linville and Blackbutt*);
- Funds for trail planning, development, management and marketing and for associated land corridor management (including: infrastructure maintenance, weed management and fire management) are yet to be secured.

5. The Region and its Characteristics

5.1 South Burnett and Gympie

South Burnett Regional Council (SBRC) had a population of 33,000 in 2010. SBRC's predicted population for 2031 is 43,000 (Source: *Wide Bay Burnett Regional Plan 2011* (<http://www.dlqp.qld.gov.au/resources/plan/wide-bay/wbb-regional-plan.pdf>)).

Approximately one third of the rail corridor is within the SBRC region. Kingaroy has the largest population directly connected with any part of the corridor and is the southern end of the proposed KTRT.

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Gympie Regional Council (GRC) had a population of 49,000 in 2010. Gympie's predicted population for 2031 is 69,000. (*Wide Bay Burnett Regional Plan 2011*). Around two thirds of the rail corridor is within the GRC area. Gympie is 30 km south of Theebine and the KTrc.

Gympie and most of the residents of the Gympie Regional Council area do not have the same sense of connection to the KTrc as do people living in those communities in the South Burnett which are located on the KTrc. The KTrc crosses the SBRC and GRC boundary midway between Murgon and Goomeri. From there to Theebine, the KTrc passes through a rural landscape which is sparsely settled compared to the KTrc in the SBRC area.

Theebine is a very small settlement with few existing facilities or attractions for trail users. The exception is the Theebine Hotel - a country pub with traditional Queensland architecture and character. Passenger rail services between Gympie and Maryborough do not stop at Theebine (or any other place between these larger regional towns). This small township is about 10 kilometres from the Bruce Highway via local roads, and has no routine bus service or other public transport. There is little or no prospect of public transport direct to Theebine in the foreseeable future. About 1.5 kilometres of rail line and corridor land between Theebine and Old Gympie Road is retained by QR for development as a shunting yard and maintenance facility and is not available for re-development as rail trail. Theebine is therefore considered unsuitable as a trail head or access point.

The most suitable northern trail head for the KTRT is the township of Gunalda which is located next to the Bruce Highway seven kilometres south of Theebine and 23 km north from Gympie. With minor investment in new facilities, a trail head for horse riding could be developed at the existing GRC-managed picnic and camping area at Dickabram Bridge on the Mary River. This site would also be suitable as a terminus for small bus transport for trail users to and from Gympie.

5.2 Beyond the Kingaroy to Theebine Rail Corridor

The KTrc neighbouring landholders (and potential local "user catchments") include people living in the larger centres of Kingaroy, Wondai, Murgon, Cherbourg, Goomeri and Kilkivan as well as those living outside these townships but within 30 minute car travel time – a combined population of 15,000 people.

There is a large number of residents within 3 hours car travel time (ctt) the KTrc. The population characteristics of this wider user catchment should be considered in assessing the feasibility of the KTRT as the potential user population is a key factor. The population characteristics of the surrounding regions are:

- The *near neighbours* (Wide Bay and Burnett region)
 - to the north- Fraser Coast (Maryborough and Hervey Bay) (1.5 hours)- 102,000 people (2010) with an indicative planning population for 2031 of 147,000;
 - to the east- Gympie- (0.5-1 hour to Theebine/Gunalda, 2-2.5 hours) to Kingaroy- 50,000 people, by 2031, growing to 69,000 - provides potential trail users in terms of 'day-trippers'
- South East Queensland
 - to the Sunshine Coast- (2.5 hours ctt) - 335,000 people
 - to Brisbane City (3 hours ctt) - 991,000 people in 2006 increasing to 1.27 million by 2031 with about 500,000 living north of the Brisbane River;
 - to Ipswich and SEQ's "Western Corridor", (2.5 hours ctt) - potential trail users familiar with the BVRT and the Boonah to Ipswich Trail – currently about 150,000 with predicted combined population growth to 600,000 by 2031.
 - to Toowoomba (2 hours ctt) - potential trail users familiar with the BVRT and the National Bicentennial Trail; 131,000 in 2006 growing to 160,000 by 2031.

In summary, there are currently 15,000 people who are rail corridor *immediate neighbours*, 130,000 people who are *near neighbours*, and 3 million people in SEQ who are *regional neighbours*, within 3 hours ctt of the proposed KTRT. The population of both the SEQ and

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WBB regions is predicted to grow substantially by 2031, enhancing the potential for growth in visitor numbers.

Given these potential trail-user populations, the options for linking the KTRT and the BVRT to create a 350 kilometre recreation trail from Ipswich to Theebine have also been examined. A potential non-rail corridor 'trail link' between the proposed KTRT and the BVRT has been identified southeast from Kingaroy to Nanango, then south to Yarraman in the Toowoomba Regional Council (TRC) area. A second potential trail link is from Nanango south-east to the BVRT at Blackbutt/Benarkin thus bypassing Yarraman. Both potential trail link options are located on existing stock routes (SRs) and local-government controlled roads. SBRC has made some preliminary investigations into these potential options but, further detailed investigation is required.

5.3 Tourism

Tourism is a major contributor to Queensland's economy and this is recognised by the Queensland Government in the *Four Pillars* policy framework. The significance of tourism in providing regional services, jobs, investment and growth in towns and communities throughout Queensland is acknowledged in the Government's *Tourism Strategy* (<http://www.destq.com.au/PDF's/LNP%20Tourism%20Strategy.pdf>) on page 1.

Tourism issues for the SBRC and GRC are addressed in several policy and planning documents. The SBRC Community Plan is a key example.

In relation to the KTRT, the opportunities and constraints are summarised as follows:

- Currently, tourism is not a strong industry sector for SBRC and the rural parts of GRC. Both regions have limited soft and hard infrastructure which can support tourism growth.
- There are reasonable road links to Brisbane, Sunshine Coast, Fraser Coast, Ipswich and Toowoomba. However, the road links to the Sunshine Coast hinterland are poor for conventional motor cars but attractive for 'soft roaders' and four wheel drive enthusiasts.
- The Brisbane Valley Highway - the primary road transport route from Ipswich - needs upgrades (e.g. passing lanes).
- Regional visitor attractions and tourism service infrastructure need greater diversity, better integration and, in some locations, development or quality upgrades.
- There are limited visitor accommodation options, visitor services and tourism facilities outside the townships along the KTRT.
- Key markets are:
 - Greater Brisbane area residents and visitors – daytrips and 'short breaks';
 - Business and commercial travellers converting to tourism experiences;
 - Toowoomba City residents and visiting family and relatives (VFR) markets (especially new residents); and
 - Special interest markets (ecotourism, shopping, events, heritage, sports, education, and small conferences).
- For the south east Queensland-based market – both the SBRC and GRC are attractive 'short break' (breaks of three nights or less) options – provided catalyst infrastructure, such as well managed recreation trails, is available.
- There are significant potential economic benefits for the SBRC and GRC areas from implementation of the *South East Queensland Country Tourism Opportunity Plan 2009-2019*³,
- There are emerging opportunities to link to existing coastal and rural tourism attractions including those established around Gympie (e.g. the Gympie Music Muster), the Mary Valley Rattler (historic railway) country music festival, growing rural market e.g. Mary Valley.
- There are significant low-capital-cost opportunities to further extend and diversify the growing adventure/ecotourism markets by linking the existing long distance trails in the

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region (the BVRT, the Blackbutt district trails network and the Bicentennial National Trail) by developing the KTRT.

On pages 17 and 20 of the *South East Queensland Country Tourism Opportunity Plan 2009-2019*, an extension of the existing Brisbane Valley Rail Trail from Yarraman via Nanango and the KTRT to Theebine is proposed as one of several “catalyst” tourism projects for the region:

“Extension of the Brisbane Valley Rail Trail into the South Burnett from Yarraman through Nanango, Kingaroy, Wondai, Murgon and ending in Theebine. The development of this trail will take many years to complete and therefore it is proposed to link the priority sections of the route with parts of the existing Bicentennial National Trail. The development of the trail would follow similar design and master planning principles to the existing Brisbane Valley Rail Trail sections

5.4 Regional and Local Planning

5.4.1 Wide Bay Burnett Regional Plan

The *Wide Bay Burnett Regional Plan September 2011*⁴ (WBBRP) is the Queensland Government’s current plan to encourage growth, enhance the region’s lifestyle and protect the environment (DIP, 2009).

The WBBRP outlines an urban footprint which identifies land suitable for urban development to cater for the population growth in the Wide Bay Burnett region until 2031. The Urban Footprint incorporates the full range of urban uses, including housing, industry, business, infrastructure, community facilities and urban open space within established urban areas, broad hectare and remnant broad hectare areas that could be suitable for future urban development.

Kingaroy, Wondai, Murgon, Goomeri and Kilkivan are identified within the Urban Footprint and are key nodes of existing support infrastructure (accommodation, food and beverage supplies and transport) along the KTRT. In turn, conversion of the KTRC into a recreation trail will provide these townships with outdoor recreation infrastructure which supports growth, increased economic diversity and improved lifestyle for these communities. Flow-on effects include more opportunities to retain a skilled workforce.

5.4.2 Gympie and South Burnett Regional Council - Planning Schemes

The current planning schemes for SBRC and GRC are derived from the various planning schemes developed for each local government area prior to the 2008 local government amalgamations. For example, the SBRC planning scheme incorporates components of the previous planning schemes for the former Nanango, Kingaroy, Wondai and Murgon Shire Councils. The planning schemes and supporting maps show the KTRC but do not recognise the rail corridor as significant infrastructure or its potential conversion to outdoor recreation-based tourism uses.

The scheduled review of the SBRC planning scheme is an opportunity to identify the KTRT and potential trail links within the strategic framework of the planning scheme. Matters to be considered include protecting the KTRC and trail links from impacts of incompatible uses (e.g. through buffers to intensive agriculture, extractive industry, industrial development), locations for environmental enhancement (e.g. landscape amenity plantings and other treatments, ecological and open space corridor establishment) and preferred solutions for minimising impacts (especially by preventing severance of the KTRC for recreation trail uses) arising from new infrastructure (e.g. road crossings, electricity easements).

In particular, future SBRC planning schemes could recognise the proposed principal cycle network as well as local open space plans so as to reconnect neighbourhoods and communities along the KTRT to other elements of a local and regional trails network for a mix of commuting and recreation benefits.

⁴ <http://www.dsdip.qld.gov.au/regional-planning/wide-bay-burnett-regional-plan.html>

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These planning scheme measures need to complement the actions and outcomes of various non-statutory planning and policy measures such as community plans, tourism/economic development plans, natural resource management plans, heritage management plans, environmental/biodiversity conservation strategies and corporate plans.

5.5 Plans and strategies dealing with outdoor recreation

5.5.1 Wide Bay Burnett and South East Queensland Regional Plans

Given the 2.5 hour travel time from the major population centres in SEQ to either end of the KTRT, the planning policies in both current regional plans are relevant to the development and management of the KTRT. The *South East Queensland Regional Plan 2009-2031* (SEQRP 2009-2031) specifies *principles, policies and programs* for outdoor recreation. The key regional planning policy is for development and implementation of the *South East Queensland Outdoor Recreation Strategy* (SEQORS). The *Queensland Outdoor Recreation Strategic Framework 2010-2015* (<http://www.dsdp.qld.gov.au/resources/plan/seq/qld-outdoor-recreation-strategy-framework.pdf>) extends the same priorities for outdoor recreation across the state. One priority action from these strategies is to coordinate outdoor recreation services.

Development and management of the KTRT will require coordination and collaboration between SBRC, CRC and the five state government departments which have relevant powers and responsibilities – Transport and Main Roads; Natural Resources and Mines; Environment and Heritage Protection; National Parks, Recreation, Sport and Racing; and Tourism, Major Events, Small Business and the Commonwealth Games.

The *Wide Bay Burnett Regional Plan 2011-2031* (WBBRP) provides a framework for managing growth, land use and development in the region. A number of outdoor recreation strategies have been developed for the WBB region based on the principles and policies identified in the WBBRP. The key outcome sought for outdoor recreation is to provide a variety of outdoor recreation opportunities to meet priority community needs, while protecting other regional landscape values. The WBBRP also identifies the need for outdoor recreation activities to contribute to better social, health, economic, tourism, cultural and environmental outcomes. The development of the KTRT would assist in achieving the outcomes of both the SEQ and WBB regions.

A number of Desired Regional Outcomes (DROs) and related Principles are relevant to the proposed KTRT follows:

- 2.4 Regional landscapes
- 2.5 Greenspace (Public Open Space) network
- 3.1 Natural resource management
- 3.2 Ecosystem-dependent economic resources
- 4.1 Sustainable rural economy
- 4.2 Rural growth
- 5.1 Strong communities and social planning
- 5.2 Addressing social and locational disadvantage
- 5.3 Healthy and safe communities
- 5.4 Community engagement, capacity building and identity
- 6.1 Traditional owner and elder engagement
- 6.2 Community engagement
- 7.2 Planning for growth
- 8.2 Heritage and character
- 8.3 Rural towns
- 9.2 Infrastructure supporting job creation and business opportunities
- 9.5 Tourism development
- 10.7 Efficient, accessible and safe transport

Policies relevant to the KTRT and its integration into the new SBRC planning scheme include the following:

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- Establish and maintain a network of accessible outdoor recreation areas, including regional parks, trails and waterways, as well as private lands with the voluntary agreement of landowners
- Manage outdoor recreation activities to provide for community needs and expectations whilst protecting and maintaining ecological, scenic and cultural heritage values
- Coordinate planning and delivery of outdoor recreation services within the framework of a regional strategy
- Incorporate outdoor recreation activities and opportunities in land use and natural resource planning and management
- Incorporate outdoor recreation activities, infrastructure and opportunities in planning and management for land use, priority infrastructure and natural resources
- Coordinate outdoor recreation services—including policy, planning, development, management and regulation—across the region

The current and previous versions of the SEQ Regional Plan have played an integral role in the development of plans and strategies for outdoor recreation, trails and cycle networks for SEQ. The plans developed to achieve the policies of the SEQ Regional Plan include:

- *South East Queensland Active Trails Strategy 2007*⁵ (SEQATS)
- South East Queensland Outdoor Recreation Demand Studies⁶ – 1997, 2001 and 2007
- The South East Queensland Principle Cycle Network Plan.

The following sections provide a summary of the existing plans and strategies and demonstrate how the KTRT could assist in achieving certain desired recreational outcomes for the South Burnett and Gympie regions.

5.5.2 Active Trails: A Strategy for Regional Trails in South East Queensland

The SEQATS details how the SEQ Regional Plan policies for recreation trails can be achieved. The SEQATS complements other initiatives of the SEQ Regional Plan such as the SEQORS and the regional public open space (or greenspace) network.

According to the SEQATS, there is an increasing emphasis on a “fit and active lifestyle” which suggests that planning for the provision of trails in SEQ and adjoining regions is needed to meet the demands of the growing SEQ population.

There is no equivalent to the SEQATS for the Wide Bay Burnett region so no trails are identified as possible recreation pathways including the KTRT. However the conversion of this corridor into a recreation trail would assist in fulfilling the intentions of this or future WBB equivalent plan by providing a multi-use recreational trail.

As has been noted earlier, development of the KTRT provides the link between the BVRT (part of the south east Queensland regional trails network) and the Fraser Coast Rail Trail (Maryborough to Hervey Bay) and the Bicentennial National Trail to create a nationally significant network of long distance recreation trails possibly including the Noosa Trails Network, the trails network in the Gympie district national parks and state forests and the Conondale Range Great Walk. In this way the KTRT would be a key part of the south east Queensland “Great Trails Network” - a *trans-regional* recreation trail network.

5.5.3 South East Queensland Outdoor Recreation Demand Study 2007 and the Outdoor Recreation Trends in South East Queensland 1997-2007

In 1997, 2001 and 2007, residents of south east Queensland, were surveyed about their participation in 12 outdoor recreation activities. In 2008, the results from these three surveys were analysed to identify patterns and trends in relation to constraints; recreation setting preferences; gender; activity preferences; and changes to participation.

⁵ <http://www.dsdip.qld.gov.au/regional-planning/active-trails-strategy.html/>

⁶ <http://www.npsr.qld.gov.au/recreation/outdoor.html>

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Of the 12 recreation activities identified in the SEQORDS, three of the activities could be undertaken on the proposed KTRT – walking, bicycling and horse riding. The trends of each of these activities across the three SEQORDS (1997-2007) are summarised below.

Activity Trends Identified in SEQORDS

Walking From 1997- 2007, walking was the activity with the second largest participation rate. "Somewhat natural settings" are most used for walking, but increasingly *very natural settings* are preferred.

Bicycling had large increases in activity-events in each of the three surveys. This is attributed to increased participation by older age groups. Constraints did not reduce participation rates. The predominant use was in *somewhat natural settings* (probably for road bicycles) but increasingly *very natural settings* were being used (probably for mountain bike riding). This suggests that there was significant increase in mountain bike riding on unsealed tracks.

Horse Riding Activity-events increased significantly. Use of *very natural* and *somewhat natural settings* increased while use of *totally natural* setting declined over the three SEQORDS.

For most of the 12 outdoor recreation activities surveyed, there was a major decline in participation rates particularly in the 25–54 age groups through increases in 'health' and 'family' constraints. Other contributory factors to this decline in participation are likely to include:

- discretionary time pressures – possibly related to the introduction of Sunday retail trading;
- drought; and
- significant increases more than 40%) in the cost of fuel for motor vehicles.

Development of the KTRT would provide a new recreation trail opportunity for the people in WBB and SEQ to participate in three popular and 'in demand' outdoor recreation activities - walking, bicycling and horse riding.

5.5.4 South East Queensland Outdoor Recreation Strategy

The SEQORS provides a framework for coordinating the assessment, planning, delivery and management of outdoor recreation opportunities and facilities across the region. A large proportion of people in SEQ (and, likely, in other regions) regularly participate in a variety of outdoor recreation activities in a wide range of 'settings' and locations in non-urban landscapes.

While it is located outside SEQ, the KTRT is within 2.5 hours ctt for many residents of that region. The KTRT has the potential to help satisfy the unmet demand for outdoor recreation opportunities (especially for bushwalking, cycling and horse riding) from SEQ - the region with the biggest and fastest growing population in Queensland.

5.5.5 South East Queensland Principal Cycle Network Plan

The *South East Queensland Principal Cycle Network Plan*⁷ (SEQPCNP) provides a framework for future cycle network planning in the region. This plan has been prepared by the Department of Transport and Main Roads (DTMR) in consultation with local governments throughout SEQ. It is intended to guide the development of a connected cycle network across the region by mapping current and desired future principal cycle routes.

In the near future, principal cycle routes will be identified the SBRC and GRC sub-regions of the WBB region. Development of the KTRT provides an opportunity for consolidating the inter-regional network of cycle routes identified within the SEQPCNP.

5.5.6 Strategic Transport Network Investigation

Cycle networks form an important part of the future transport system for the study area. According to previous rail trail studies, rail corridors are ideal for redevelopment as cycling trails due to the absence of steep grades, absence of motor vehicle traffic and their capacity

⁷ www.tmr.qld.gov.au/Projects/Name/S/South-East-Queensland-Principal-Cycle-Network-Plan.aspx

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to serve a direct route between major development areas. The proposed KTRT is featured in the *Queensland Cycle Strategy 2011-2021*⁸.

5.5.7 Active Transport- integrating walking and cycling

Walking and cycling are referred to as 'physically active' or 'active' transport modes in many policy statements. These activities are readily catered for in the design, construction and management of 'shared pathways' for commuting and for recreation.

5.5.8 Horse Riding

Integration of walking and cycling with horse riding can be a significant challenge, particularly in locations with high volumes of walking and cycling, where busy roads are crossed, or in other locations where safety issues arise. Erosion and damage of trail surfaces arising from horse riding requires suitable surface treatment, signage and an accepted culture of shared path use. Alternative trail routes and design options for horse riders may be necessary in some circumstances. There is a considerable body of professional practice in planning, constructing and managing recreation trails for walking, cycling and horse riding. Advice on shared trail policy, planning design and management is available from:

- The Australian Trail Horse Riders Association (ATHRA <http://athra.com.au/Index.aspx>); and
- The (Queensland) Department of National Parks, Recreation Sport and Racing (http://www.derm.qld.gov.au/parks_and_forests/activities_in_parks_and_forests/horse_riding_and_cycling.html)

5.5.9 Lake Barambah

Lake Barambah (Bjelke-Petersen Dam) has many recreation and tourism opportunities and is a premier destination close to the KTRT. Limited consultation was undertaken with officers of SBRC to determine what type of recreation activities would be compatible with dam operations and environmental attributes of lake and surrounding lands. Based on the lake's attributes, the key recommendation is to further investigate opportunities to provide trail links to and from the KTRT for walking (bushwalking), cycling (including mountain-biking) and horse riding. Any such development would be subject to consultation with the Cherbourg Aboriginal Shire Council and community representatives. These matters can be addressed in a future revised recreation master plan for the dam.

5.5.10 Lake Boodooma

Lake Boodooma also has many recreation and tourism opportunities. However, it is not readily accessible by walking cycling or horse riding from the KTRT. Given the lake's distance from the KTRT, a trail link from the KTRT is not recommended.

5.5.11 Gordonbrook Dam

Gordonbrook Dam is 20 kilometers from Kingaroy, but less than 10 kilometers from the KTRT. The dam is the sole source of water supply for Kingaroy. This dam has limited recreation and tourism opportunities although there are walking tracks along the waters edge, picnic tables and wood fired barbecues are provided. Camping is not permitted. Fishing, sailing, boating and water skiing are only permitted when the risks from blue-green algae in the water are negligible. Given the Gordonbrook Dam's limited attributes for tourism, a trail link from the KTRT is not recommended. However, increased visitation should be anticipated as a consequence of the establishment of the KTRT.

6. Stakeholder Consultation

6.1 Introduction

Determining the level of support by public, business and other stakeholders for a rail trail proposal is important. However, at this stage, the focus of consultation has been internal between State Government agencies and local government, in particular South Burnett Regional Council.

⁸ <http://www.tmr.qld.gov.au/Travel-and-transport/Cycling/Strategy.aspx>

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6.2 Overview of Consultation Activities

Discussions between DSDIP, DTMR and QR and SBRC have been undertaken on a regular, basis for several years. There has been no participation by representatives of Cherbourg Aboriginal Shire Council in this feasibility study. GRC has opted not to be a partner to this feasibility study.

In April 2012, a Project Management Group (PMG) was formed consisting of representatives of DSDIP, DTMR and SBRC. An initial meeting was held in April in the SBRC offices at Kingaroy between representatives of SBRC and DSDIP. This was followed by a meeting in Brisbane attended by representatives of SBRC, DSDIP and DTMR. A third meeting in Kingaroy was held in June 2012. During this period, there was also a telephone conference involving DSDIP, DTMR and SBRC. DSDIP also met with Queensland Rail Limited (QR) in April 2012.

A decision was made by the PMG at the first meeting to accommodate the possible involvement elected Council representatives as well as selected community representatives acting as a reference group. That option was not taken up.

There have also been numerous telephone and email communications between all parties covering a variety of matters including requests for technical information, clarification of certain facts and feedback on matters within the scope of the study.

In addition, internal consultation was held within DSDIP regarding lessons learned from the development of the BVRT and application to future trail initiatives. Communication has also extended to officers of Fraser Coast Regional Council in relation to the status of a partly completed rail trail from Maryborough to Hervey Bay.

7. Consultation Outcomes

7.1 Overview

There is strong support from SBRC. GRC remains wary of the risk of financial commitment. One of the key concerns raised by SBRC relates to various risks such as maintenance and repair costs for residual rail infrastructure (e.g. railway bridges). The matters raised have been addressed to the extent that is possible at this time. Some of these matters will require more detailed investigations during subsequent stages of the planning process

Community consultation is considered premature at this early stage, so the level of local community support for the proposed rail trail is largely unknown. There has been no formal external consultation with the community or other stakeholders. However, during the course of field work and site visits in the district, some effort was made to discretely gauge local knowledge and opinions about the future of the rail corridor.

In general, the comments by people from the neighbouring local communities indicate limited knowledge of the status of the KTrc. Most local residents who live close to the KTrc know only that it is a closed rail line and that salvage work is proposed or has commenced. A few people believe that the Theebine to Kingaroy rail line has any prospect of reopening for rail use. Few have any knowledge of options for future use of the KTrc including the possible redevelopment as a rail trail.

7.2 The Issues

In this study, the consideration of 'community' focuses on potential trail users and tourism/recreation service providers. The local community has different attitudes to those of potential rail trail users. Because some people living alongside this railway corridor may be concerned about the prospect of change to its use, the proposal for a recreation trail along the railway corridor may arouse concerns. Such concerns centre upon the potential behaviours of users that may impact on lifestyles and livelihoods of "rail trail neighbours" - such as the risk of vandalism.

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Based on the experience of community consultation during other rail trail proposal studies, there are a number of specific concerns and issues that are considered likely to arise. These issues include trail maintenance, privacy, vandalism and unauthorised usage. Adjacent landholders are often apprehensive about trails close to their properties. It is important that these concerns are seriously addressed in any consultation process. However, it should be noted that for the existing rail trails in Australia, including the operating section of the BVRT between Moore and Yarraman, these problems either do not occur or are successfully managed.

Adjacent landholders who understand and support trail development provided the trail is well managed will prove to be extremely valuable partners and community advocates. Indeed, some of them will take advantage of business opportunities offered by the rail trail. Successful case studies demonstrating local community benefits, such as those in the operating sections of the BVRT, will play an important role in winning the confidence of local community members.

8. Demand for rail trails

8.1 Overview

The demand for rail trails specifically, and recreation trails in general, is influenced by many factors, including population trends and demographics, existing recreation trends, and supply generated demand.

This project did not include new survey work in the analysis of resident and visitor demand. Instead, conclusions have been drawn using available data from other parts of Australia.

The demographics of the regions near the proposed KTRT are detailed in section 5.3 above. Sub-section 5.5.3 summarises the results of outdoor recreation demand research in south east Queensland. This section addresses the demand for the development of the KTRT.

Population Trends and Demographics Recreation and Physical Activity Trends Participation in Trail-related Activities Cycle Tourism Supply Generated Demand

The *Exercise, Recreation and Sport Survey (2007)*⁹ reports on participation in trail-related activities at a general population level:

- 33% of survey respondents across Australia participated in walking, making it the most popular form of activity. This figure marks an increase of 24% since the first survey in 2001;
- 9.7% of survey respondents across Australia participated in cycling, making it the fourth most popular form of activity. This figure marks an increase of 11% since the first survey in 2001; and
- 5.7% of survey respondents across Australia participated in bushwalking, making it the seventh most popular form of activity. This figure marks an increase of 17% since the first survey in 2001.

Two findings from the *South East Queensland Outdoor Recreation Demand Study 2001* (see section 5.5.3) are also relevant:

- Significant technological advances in equipment design and function have created new forms of outdoor activities and extended the scope and levels of participation for the general population; and
- 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 ('sea change') residential drift, 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).

⁹ <http://www.ausport.gov.au/information/casro/ERASS>

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Together, these two trends indicate increased demand for non-motorised self-organised outdoor recreation (as opposed to formally organised sporting activities).

Population Trends and Demographics

Population statistics, including resident and visitor numbers, are discussed in Section 11 the Business Case of this report with the key points being:

- The population in the trail's immediate 'neighbourhood' is about 34,000 people;
- The population in south east Queensland (generally within 2.5 hours ctt of the KTRT) is predicted to increase for about 3 million in 2011 to about 4.5 million in 2031 (*Population and Dwelling Profile: South East Queensland, April 2012* www.oesr.qld.gov.au);

8.2 Conclusion

Australians are increasingly looking for non-organised recreation opportunities, often in natural or near-natural settings. Demand for this type of opportunity will only increase as the population ages. Residents of South Burnett region and Gympie region are likely to have similar desires. It is also reasonable to assume that visitors to the region have similar desires.

Many residents from higher density population centres such as Brisbane City, Ipswich and the increasingly urbanised coastal strip of SEQ are even more likely to seek a "country escape" short break in the rural settings of South Burnett and Gympie region.

While walking remains the most popular recreation activity, off-road cycling (riding a bicycle on unsealed tracks) has a growing and often unmet demand for trails. It is this particular niche activity (off-road cycling) that the proposed KTRT would fulfil. This is demonstrated by the high usage of established rail trails by cyclists. A rail trail would also provide a significant high quality walking and horse riding opportunity.

9. Trail Design and Development Considerations

9.1 General Considerations

A key objective for trail development is the design and construction of a functional trail that is constructed with minimal disturbance to the environment, is designed with user needs in mind and requires minimal maintenance.

9.2 Key infrastructure items

9.2.1 Bridges

The KTRc has a number of bridges, mainly timber but also timber and steel construction. In general they appear to be in very good condition needing little or no repair work. Bridges are an obvious reminder of rail history and a significant attraction along rail trails. The KTRc has a large number of timber bridges- field work and records indicate there are more than 20 bridges totalling over 1000 metres. A notable bridge is the Dickabram bridge which is mainly steel construction, and several hundred metres long. The majority of bridges are located between Goomeri and Miva crossing the tributaries and watercourses flowing into the Mary River. There is also a significant bridge crossing near Wondai.

Reinstatement and refurbishment of the bridges will be significant cost of establishing the rail trail. Alternatives to refurbishment, including as an interim measure whilst waiting for funding, is to construct a boardwalk or floodway at a lower level in the waterway. Numerous bridges cross waterways which appear to be dry gullies most of the time. They may be readily crossed without need for any construction works; the only costs being slashing of an access track, or placement of basic surface material such as gravel road base. .

9.3 Other infrastructure items

A range of other matters affect cost of trail establishment including the following:

- suitable trail width and height
- trail surface material

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-
- safety considerations
 - road crossings
 - signage
 - directional signage
 - warning signage
 - promotional signage
 - user behaviour signage
 - distance and direction signs at access points
 - other attractions signage
 - interpretive signage
 - emergency management signage
 - erosion control and drainage
 - trail facilities/ furniture (Seats, tables, shelters)
 - “Soft” infrastructure-shade structures and shade planting

Trail design and construction standards are important to minimise disturbance to heritage structures and rail corridor values and to ensure cost effective and fit-for-purpose trail foundations and surfaces, bridge modifications, road crossings, signage and maintenance regimes. Some of the design considerations for the proposed KTTR are:

9.1 Trail Width

To function effectively as a multi-use trail, a rail trail should have a standard width of 2.5 metres. If, in some sections the surface is wider, this should not be seen to be a negative factor.

9.2 Trail Surface Material

A smooth compacted surface is often the most appropriate for a multi-use rail trail. The surface should be firm enough to provide cyclists with a relatively smooth ride. A separate natural surface horse trail should be developed, parallel with the main bicycle/walking trail surface, where appropriate.

However, at least some part of the proposed KTTR is likely to have a significant role as a commuter path as well as a recreational trail. It is therefore appropriate to develop it as a hard surface to facilitate commuter as well as recreational use. It is therefore recommended that the trail be developed to this standard in the following locations (indicative distance):

- From Kingaroy town centre south for a distance of 2-3 km and north (to Meier’s Road) for a distance of 2-3 km
- From Wondai town centre south and north for a distance of 1-2 km
- From Murgon town centre south and north for a distance of 1-2km
- From Goomeri town centre south and north for a distance of 1-2 km
- From Kilkiyan town centre south and north for a distance of 1-2 km

It is recommended that the case for a semi -continuous sealed section from Kingaroy to Memerambi and Murgon to Wondai should be investigated. Local trail loops using local roads, both sealed and unsealed, to provide alternative return travel options and greater flexibility of trail use should also be investigated.

9.3 Road Crossings

The trail crossing of the major transport corridors in each of the towns, crossings near smaller villages such as Wooroolin and crossings of local roads, such as the road to Woolgoolga, present design challenges for the project. It is recommended that the approach taken to these crossings incorporate elements of the *Austrroads Preferred Treatment of Road/Path Intersection*.

9.4 Signage

Several kinds of signage are required on a rail trail, including distance, directional, warning, promotional, etiquette and interpretive signs. Each should be standardised along the trail and, where appropriate, consistent with relevant local or Australian ‘standards’ or practices.

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9.5 Bridge Crossings

There are a large number of timber bridges on the rail corridor – field work and aerial photograph analysis indicate there are more than 25 timber bridges totalling over 1000m metres – a notable bridge is the steel/ iron constructed Dickabram bridge which carries vehicles over the Mary River.

Reinstatement and refurbishment of the bridges, including re-decking and installing handrails in compliance with Australian Standards for bridges, will be a major component of the cost of establishing the rail trail. If the trail proceeds, there is a strong case for retention of bridges for their heritage and convenience/ utility value while also retaining the positive experience of riding along the top of old bridges with panoramic views of the surrounding landscape.

As this is a business case, a detailed structural assessment of every bridge along the railway corridor has not been undertaken. Engineering certification of all bridge supporting structures and abutments is strongly recommended, to ensure their structural soundness.

9.6 Trail Heads and Parking

Given that much of the usage of the trail is likely to come from walkers and mountain bikers from other regions and from horse riders who float horses to the trail, formal 'trail-heads are important (a 'trail-head' is a 'starting point' with parking, signage, toilets, etc). Trailheads should be located at strategic locations along the corridor with the recommendations being:

- Kingaroy- at the rail station
- Wooroolin- at the park near the wetland reserve
- Wondai- at the rail station
- Murgon- at the rail station
- Goomeri- at the rail station
- Kilkivan- at the rail station
- Woolooga- at the rail station
- Theebine- at the park near the hotel (for horse riding)- the end of the trail for horse riders (or the park on the Miva side of Dickabram bridge to avoid the need for horse crossing facilities)
- Gunalda- at the park near the hotel (for cyclists and walkers)- the end of the trail overall

All trailheads will require detailed design before the project proceeds. Trailheads may need to incorporate proposed road widening and realignments. SBRC, GRC and CASC will require negotiations with Queensland Rail and DTMR in cases requiring construction and earthworks. Infrastructure, such as seats and tables, water and toilet facilities, benefits all trail users. The locations of these facilities have been identified within all the settlements through which the trail passes. The locations where they occur or should occur are mainly located at potential trail heads and nearby parks.

The accepted distance between toilets for cyclists is 25-30 km, however this is inadequate for walkers. Some additional facilities outside existing settlements will need to be provided for the trail to serve all modes, not just cyclists. This includes the sections from Goomeri to Kilkivan and Kilkivan to Woolooga as shown in the tables above. The lack of water for drinking purposes, and other basic facilities such as picnic tables and shelters will also be an issue for these sections.

In addition to hard infrastructure and facilities, extensive shade and amenity plantings are essential for trail enjoyment in the sub tropical climate that the Wide Bay Burnett region enjoys. Shade plantings can prolong the daily and seasonal use levels into hotter parts of the day, as well as reduce wind chill in cooler weather.

All the above factors need to be taken into account when determining cost estimates- both general and more detailed trail expenditure estimates.

Target Audience and User needs

The target audience for whom recreation trail use is being planned is a key factor in considering trail design, intended function and development. The characteristics of the target

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audience for use of the proposed KTTR that this report has in mind is the middle demographic group of individuals and families who have reasonable/ average fitness; not those at the extreme ends of the health and fitness spectrum (i.e. neither the super fit nor severely unfit or disabled). The target age range is middle primary school aged children (at least 10 years old) to middle aged adults (up to 55 years). Identifying the age and other user characteristics are also important in gauging the capacity to spend which determines overall expenditure. In general, a trail that appeals to a wide range of ages and user groups should better capture spending patterns of different sectors.

A key factor proposed to assess the suitability for recreation use of each section of the corridor is the distance between towns or localities with facilities that can act as day-use destinations; a key factor affecting fatigue, enjoyment affecting positive experiences and an incentive to make a return visit. It is accepted that the distance measures selected below are arbitrary and somewhat subjective. Never the less this approach is based on a good understanding of surveys of trail user preferences regarding "comfortable" trail distances. It is therefore considered to have some validity and it provides a useful starting point for further assessment using additional criteria affecting trail user needs and wants.

The physical condition of the KTRC varies along its route but is constantly of an even grade and almost flat. It is anticipated that in accordance with conditions of approval for track salvage operations, in the post salvage stage the corridor will be graded and capped and left in a generally good condition throughout to facilitate other uses such as potential conversion to a recreation rail trail. Site inspections in June confirm the corridor being left in a good condition, Photographic evidence of this is also available, recorded during site investigations as recently as June 2012. These records are held by DSDIP.

Corridor or trail characteristics affecting user fatigue such as steepness are not relevant to the rail corridor because of gentle railway grade design characteristics. Short sections off the potential trail links (non-rail corridor) between Blackbutt/Yarraman and Nanango are moderately steep but have no significant impact on trail opportunity.

Different trail travel modes such as walking, cycling and horse riding have different distance thresholds affecting day use and overnight use potential. By applying a range of distance thresholds for each of the three recreation modes (walking, cycling and horse riding) a *relative* rating of recreation trail 'potential' or 'opportunity' for each mode (Good/ High to Fair/ Medium to Poor/ Low), an indicative expression of recreation potential or opportunity can be constructed. Table 9.1 below shows this relative rating of modes, distances and impact on potential or opportunity for recreation.

Table 9.1: Potential/Opportunity for recreation- day use (indicative and relative) – distance between centres/ destinations (km) along corridor

Travel mode	Distance (km)	Recreation Potential/ Opportunity
Walking	0-15	Good/ High (H)
	15-25	Fair/ Medium (M)
	>25	Poor/ Low (L)
Cycling	0-25	Good/ High (H)
	25-50	Fair/ Medium (M)
	>50	Poor/ Low (L)
Horse riding	0-20	Good/ High (H)
	20-40	Fair/ Medium (M)
	>40	Poor/ Low (L)

This approach can be applied as an assessment tool to the overall corridor (rail corridor and trail links) to determine *relative* potential and opportunities for recreation use. An overall rating can be derived from a mix of the three separate ratings for each of walking, cycling and horse riding modes, usually reflecting the most frequent (i.e. two out of three) ratings.

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A general overview of approximate distances between centres/destinations/ facilities and their impacts upon broad (day-use) recreation potential or opportunity along the overall corridor (rail trail and trail links) is shown in Table 9.2 below.

Table 9.2(a): Distance to and from destinations/ facilities (km) and rating of Potential/ Opportunity for recreation (Yarraman to Gunalda)

Destination/ start/ finish codes: B/B- Benarkin/ Blackbutt, Y-Yarraman, N-Nanango, Kn-Kingaroy, Wr-Wooroolin, Ti-Tingoora, W-Wondai, M-Murgon, Go-Goomeri, Kl-Kilkivan, Wl-Woolooga, M-Miva, T-Theebine, Gu-Gunalda, By-Byee, C-Cherbourg

	Proposed Trail Link					Proposed Rail Trail															PTL	
Distance from Yarraman *	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190		
Distance from Kingaroy *	50	40	30	20	10	00	10	20	30	40	50	60	70	80	90	100	110	120	130	140		
Destination/ start/ finish	Y		N			Kn		Wr Ti	W	M		Go			Kl		Wl		M Th	Gu		
Walking	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
Cycling	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
Horse riding	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	NA		
Overall rating	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		

* (closest 10km approx.)

Table 9.2(b): Distance to and from destinations/ facilities (km) and rating of Potential/ Opportunity for recreation (Benarkin/ Blackbutt to Nanango)

	Proposed Trail Link		
Distance from Nanango*	-20	-10	0
Destination	B/B		N
Walking	X	X	
Cycling	X	X	
Horse riding	X	X	
Overall rating	X	X	

* (closest 10km approx.)

Table 9.2(c) Distance to and from destinations/ facilities (km) and rating of Potential/ Opportunity for recreation (Murgon to Byee)

	Proposed Trail Link	
Distance from Murgon*	0	10
Destination/ start/finish	M	By
Walking	X	
Cycling	X	
Horse riding	X	
Overall rating	X	

* (closest 10km approx.)

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Table 9.2(d): Distance to and from destinations/ facilities (km) and rating of Potential/ Opportunity for recreation (Murgon to Cherbourg)

	Proposed Trail Link	
Distance from Murgon*	0	10
Destination/ start/finish	M	C
Walking	X	
Cycling	X	
Horse riding	X	
Overall rating	X	

* (closest 10km approx.)

Note, reading the table from left to right, the rating of a corridor section is shown for the destination start point but not the destination end point. For example in the table, Nanango to Kingaroy is rated Low for walking and Medium for cycling and horse riding, and Medium overall.

For example a 25-30 km distance between facilities (single day use) is considered excessive for the majority of walkers and its opportunity is rated as Low. This same distance is considered more suitable for cyclists and horse riding and is rated Medium for each. The overall rating derived from the three ratings is Medium.

Similarly, the section from Goomeri to Kilkivan is rated as Medium overall. Kilkivan to Wooroolga is rated Medium overall, but under closer examination, has greater potential than either the Goomeri to Kilkivan section or the Nanango to Kingaroy section (no single mode rated Low).

From this perspective, i.e. distance between centres/ destinations, the section of the corridor from Kingaroy to Murgon (via Wooroolin, Wondai and Murgon) is shown as the most readily accessible and suitable for all recreation modes (High overall rating). This can then be integrated into other assessments to derive an overall attractiveness rating for different sections of the corridor and potential priorities for trail development.

The overall corridor (rail corridor and trail links) has other attractive elements besides its rail heritage interest, which also contribute to potential trail use and visitation. The landscape features and facilities available for potential trail users are varied throughout the length of the overall corridor, both rail and non- rail (potential trail links) sections. A list of selected features, considered to be of some interest to potential trail users, include the following:

- Topography elements and diversity
 - Waterways and Floodplains
 - Ranges and ridgeline (+/- vistas and lookouts)
- Vegetation/ wildlife habitats and diversity
 - Native vegetation (forests and woodlands) dominant
 - Cleared areas dominant (+/- scattered trees)
 - Non-native vegetation (includes plantations)
 - Water bodies and wetlands (includes dams)
- Rail heritage value
 - Little or no evidence of rail heritage
 - Some evidence of rail heritage e.g. rail route
 - Limited preservation of rail heritage (e.g. artefacts)
 - Major preservation of rail heritage stations (e.g. bridges, signals etc)
 - Very high preservation of rail heritage (e.g. bridges, signals etc)
- Other heritage value
 - Country pubs
- Other e.g. wineries/ vineyards, key facilities

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Corridor sections

The overall corridor has been divided into a series of well defined sections between the potential trail terminus/departure points of Benarkin/ Blackbutt and Yarraman on the Brisbane Valley Rail Trail (BVRT) and the potential trail terminus/ departure points of Kingaroy (southern end) and Theebine/ Gunalda townships (northern end). Gunalda has been included because it has a number of characteristics that facilitate alternative trail head status. This includes superior access to or from the major transport network (Bruce Highway) and a greater range of facilities than Theebine.

A general inventory of landscape features for different sections of the overall corridor (rail corridor and trail links) and potential use issues arising are summarised below in Table 9.3.

Table 9.3: Landscape features (selected) adjacent to the proposed KTRT (Kingaroy to Theebine rail corridor) and Trail Links (Yarraman/ Benarkin/ Blackbutt to Kingaroy, Theebine to Gunalda, Murgon to Byee, Murgon to Cherbourg)

Corridor section	Corridor Characteristics (landscape features and facilities)	Potential use issues
1a Yarraman-Nanango (21km) (Proposed Trail Link)	<ul style="list-style-type: none"> Yarraman is BVRT trail head Yarraman has a good range of town facilities (stores, pubs). Route is east of D'Aguilar Highway crosses Yarraman Creek and tributary undulating, crosses low rise north of Cooyar Range native vegetation is dominant within the Travelling Stock Routes (TSRs), cleared areas dominant outside the TSRs Goomburra SF and South Nanango SF (and unnamed SF) contains a mix of plantation forests (core area) and native veg. (including rainforest elements) Rail heritage values not relevant Country pubs in Yarraman and Nanango 4 wineries and vineyards close to Nanango No facilities between Yarraman and Nanango. Yarraman and Nanango have good access to major transport corridor (D'Aguilar Highway) 	<ul style="list-style-type: none"> Travelling Stock Routes (TSRs) are suitable for walking, cycling and horse riding (NB further investigation required). Some minor local roads cross some main roads so they may not be suitable for horses (NB further investigation required). Horse riding unlikely to be compatible with other uses in urban centres. There are horse stalls and loading ramps close to Yarraman- BVRT trail head and horse yards located at the Nanango Showgrounds. This part of the link between the BVRT and the KTRT is moderately well suited to family trips- long day walk, moderate cycle ride, and moderate horse ride (21km).

Corridor section	Corridor Characteristics (landscape features and facilities)	Potential use issues
1b Benarkin/Blackbutt-Nanango (approx. 25km) (Proposed Trail Link)	<ul style="list-style-type: none"> Follows National Bicentennial Trail (NBT)- north of D'Aguilar Highway crosses Cooyar and Yarraman Creeks undulating mostly, some steep sections, north of Blackbutt Range native vegetation is dominant within the TSRs, cleared areas dominant outside the TSRs Goomburra SF and South Nanango SF (and unnamed SF) contains a mix of plantation forests (core area) and native veg. (including rainforest elements) Rail heritage values not relevant Country pubs in Blackbutt and Nanango No facilities between Benarkin/ Blackbutt and Nanango. 4 wineries and vineyards close to Nanango Blackbutt/ Benarkin have good access to major transport corridor (D'Aguilar Highway) 	<ul style="list-style-type: none"> The TSR is suitable for walking, cycling and horse riding (preferred) (NB further investigation required). Horse riding unlikely to be compatible with other uses in urban centres. There are horse- stalls and loading ramps at/ close to Benarkin/ Blackbutt – horse yards located at Blackbutt showgrounds, tie up posts and loading ramp located at Benarkin. This part of the link between the BVRT and the KTRT is moderately well suited to family trips- NB very long day walk or overnight walk, moderate cycle ride, moderate horse ride (25km).

Corridor section	Characteristics (landscape features and facilities)	Potential use issues
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2 Nanango-Kingaroy (25km) (Rail Corridor)	<ul style="list-style-type: none"> undulating cleared areas dominant – a mix of cultivation on the creek flats and other agriculture Rail heritage value: Little or no evidence of rail heritage (infrastructure removed many decades ago and redeveloped in part for road use) Country pubs in Nanango and Kingaroy 4 wineries and vineyards close to Nanango Nanango and Kingaroy have a good range of town facilities (stores, pubs). No facilities between Nanango and Kingaroy except Coolabunia. Kingaroy has excellent access to major transport corridors (D'Aguilar Highway and Bunya Highway) 	<ul style="list-style-type: none"> The route follows a main road (Nanango-Brooklands) for some distance so it may not be suitable for horses (also minor local roads-Nanango-Brooklands, Darley Crossing, Barker Creek, Bellbird, Eden Vale South, Kingaroy- Cooyar Roads) (NB further investigation required). Option 2 (minor local roads) crosses some main roads so it may not be suitable for horses (NB further investigation required). Horse riding unlikely to be compatible with other uses in urban centres. There are horse stalls and loading ramps at Kingaroy showground. This part of the link between the BVRT and the KTRT crosses or follows some main roads so it may not be suitable for horses.
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Corridor section	Characteristics (landscape features and facilities)	Potential use issues
3 Kingaroy-Wooroolin (16km) (Rail Corridor)	<ul style="list-style-type: none"> undulating cleared areas dominant – a mix of cultivation and other agricultural use- classic red soil landscape (> 400m elevation) wetland reserve at Wooroolin- a feature of natural history interest Rail heritage value- Major preservation of rail heritage at Kingaroy station (e.g. platform, etc) Elsewhere, limited preservation of rail heritage (e.g. artefacts), former station buildings at Crawford, Memerambi, and Wooroolin- no preservation Very limited facilities between Kingaroy and Wooroolin Wooroolin has limited town facilities (store, pub). Accommodation available nearby. Wooroolin has good access to major transport corridor (Bunya Highway) 	<ul style="list-style-type: none"> The rail corridor runs close to the Bunya Highway, generally <100m, but provides safe off-road movement, and is well suited to family trips- moderate-long day walk, moderate cycle ride, moderate horse ride (16km). The most suitable use of the section of the rail corridor within the urban centre of Kingaroy is walking and cycling- "active transport". The rail corridor crosses the Bunya Highway at Wooroolin. The most suitable use of the section of the rail corridor within the urban centres (i.e. Kingaroy) is "active transport"- walking and cycling for commuter rather than recreation purposes. Wooroolin has the closest day use and overnight camping facilities along the corridor to Kingaroy, is midway between Kingaroy and Wondai, and is readily accessible from both communities. There are no horse yards or stalls in or close to Wooroolin

Corridor section	Characteristics (landscape features and facilities)	Potential use issues
4 Wooroolin-Wondai (14km) (Rail Corridor)	<ul style="list-style-type: none"> undulating cleared areas dominant – a mix of cultivation and other agricultural use Major preservation of rail heritage stations (e.g. bridges, signals etc), former station building at Wondai- preserved former station buildings at Tingoorra- no preservation Country pubs in Wooroolin, Tingoorra and Wondai Wondai has a good range of town facilities (stores, pubs). No facilities between Wooroolin and Wondai, except Tingoorra (country pub) Wondai has good access to major transport corridor (Bunya Highway) 	<ul style="list-style-type: none"> The rail corridor runs close to the Bunya Highway, generally <100m, but provides safe off-road movement, and is well suited to family trips- moderate-long day walk, moderate cycle ride, moderate horse ride (14km). The rail corridor crosses the Bunya Highway at Wooroolin. The most suitable use of the section of the rail corridor within the urban centres (i.e. Wondai) is "active transport". Horse riding unlikely to be compatible with cycling in urban centres. Day use, overnight camping and accommodation available at Wondai. Wondai readily accessible from Murgon and Cherbourg. There are horse stalls and loading ramps at Wondai showgrounds

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Corridor section	Characteristics (landscape features and facilities)	Potential use issues
5 Wondai-Murgon (13 km) (Rail Corridor)	<ul style="list-style-type: none"> • undulating • cleared areas dominant – a mix of agricultural use • extensive areas of bushland in Wondai State Forest/ Forest Reserve/ National Park/ Cherbourg Aboriginal Shire Council land adjacent to corridor (high ecological value) • crosses Barambah Creek • views of Boat Mountain- prominent local scenic feature • Rail heritage value: Major preservation of rail heritage stations (e.g. bridges, signals etc), former station building at Wondai- preserved • Country pubs in Wondai and Murgon • Murgon has a modest range of town facilities (stores, pub). • No facilities between Wondai and Murgon except Fick's Crossing outdoor recreation centre • Murgon has good access to major transport corridor (Bunya Highway) 	<ul style="list-style-type: none"> • The rail corridor deviates away from the Bunya Highway, generally <3 km, but provides safe off-road movement, and is well suited to family trips- moderate-long day walk, moderate cycle ride, moderate horse ride (13km). • The most suitable use of the section of the rail corridor within the urban centres (i.e. Murgon) is walking and cycling- "active transport". • Trail condition upgrade would facilitate improved Wondai- Murgon connectivity • The rail corridor crosses the Bunya Highway at Murgon • Horse riding unlikely to be compatible with other uses in urban centres. • Issue with major water crossing near Flicks Crossing will need to be addressed • Murgon is readily accessible from Cherbourg, less so for Goomeri. • Murgon is a suitable interim trail hub from Kingaroy (second largest centre, tourism hub-several wineries along wine and food trail, Lake Barambah/ BP Dam. • There are horse stalls and loading ramps at Murgon showgrounds
6 Murgon-Goomeri (20km) (Rail Corridor)	<ul style="list-style-type: none"> • undulating • cleared areas dominant – a mix of cultivation and other agricultural use, mainly grazing • crosses Burnett/ Mary River catchment boundary, crosses various minor waterways-several small bridges • Rail heritage value: Major preservation of rail heritage stations (e.g. bridges, signals etc), former station building at Goomeri- preserved • Former siding structures at Moondooner, Manyung- no preservation • Country pub in Goomeri • Goomeri has a modest range of town facilities (stores, pub, day use and overnight camping facilities). • No facilities between Murgon and Goomeri • Goomeri has good access to major transport corridors (Bunya, Burnett and Wide Bay Highways) 	<ul style="list-style-type: none"> • The corridor runs close to the Bunya Highway initially, and then deviates up to 1.5km away from it. • Relative to Kingaroy to Murgon section, this section is slightly more remote, so more careful planning required • Section better suited for horse trail use than Kingaroy to Murgon sections • The presence of horse stalls and loading ramps close to Goomeri is yet to be confirmed. • This section of the corridor is moderately well suited to family trips- long day walk, moderate cycle ride, moderate horse ride (20km).

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Corridor section	Characteristics (landscape features and facilities)	Potential use issues
7 Goomeri-Kilkivan (30km) (Rail Corridor)	<ul style="list-style-type: none"> • Undulating- very hilly • cleared areas dominant , narrow strip of vegetation within rail corridor, agriculture mainly grazing • Mary River catchment , crosses various minor waterways- several small bridges • Rail heritage value: Major preservation of rail heritage stations (e.g. bridges, signals etc), former station building at Kilkivan- preserved • Former siding structures at Kinbombi, Coleman, Cinnabar, Wygarr- no preservation • Country pub in Kilkivan • Kilkivan has a modest range of town facilities (stores, pub). • No facilities between Goomeri and Kilkivan • Kinbombi Falls reserve nearby • Kilkivan has good access to major transport corridor (Wide Bay Highway) 	<ul style="list-style-type: none"> • The rail corridor runs close to the Wide Bay Highway part of the way, and then deviates up to 5km away from it. • Day use and overnight camping facilities at Goomeri. • Day use and/or overnight facilities mid way between Goomeri and Kilkivan would enhance trail use, either Kinbombi (reserve land nearby) or Coleman (midway point) or Cinnabar (reserve land nearby) • Relative to all other sections, this section is the longest and most remote, so more careful planning required. • The presence of horse stalls and loading ramps close to Kilkivan is yet to be confirmed • This section of the corridor is potentially well suited to family cycling trips (moderate-long cycle ride), long day horse ride or overnight walk (30km).NB not currently suitable for day walk due to excessive length and lack of facilities.

	Characteristics (landscape features and facilities)	Potential use issues
8 Kilkivan-Woolooga (19km) (Rail Corridor)	<ul style="list-style-type: none"> • Undulating- very hilly • cleared areas dominant – a mix of cultivation and other agricultural use • follows Mary River tributary and floodplain- longest waterway exposure • crosses waterway several times, several small bridges • Rail heritage value: Major preservation of rail heritage stations (e.g. bridges, signals etc), former station building at Woolooga- preserved • Former siding structures at Mouingba, Bular, Oakview, Nondiga- no preservation • Country pub in Woolooga • Woolooga has few town facilities (store, country pub). • No facilities between Kilkivan and Woolooga • Woolooga has good access (3km) to major transport corridor (Wide Bay Highway) 	<ul style="list-style-type: none"> • The rail corridor runs close to the Wide Bay Highway part of the way, and then deviates up to 3km away. • Day use and overnight camping facilities at Goomeri. • Day use and/or overnight facilities between Kilkivan and Woolooga would enhance trail use, either Bular (reserve land nearby) or Oakview (midway point). • The presence of horse stalls and loading ramps close to Woolooga is yet to be confirmed. • Relative to Kingaroy to Murgon sections, this section of the corridor is slightly more remote, so more careful planning required. • This section of the corridor is reasonably well suited to family trips- overnight or long day walk, moderate cycle ride, or moderate horse ride (19km).

Corridor section	Characteristics (landscape features and facilities)	Potential use issues
9 Woolooga-Miva (18km) (Rail Corridor)	<ul style="list-style-type: none"> • Undulating, flood plain flat • cleared areas dominant – a mix of cultivation and other agricultural use • follows Mary River tributary and floodplain • crosses waterway several times, several small bridges • Rail heritage value: variable preservation of rail heritage (e.g. bridges, signals etc) • Former siding structures at Boowoogum, Sexton, Miva- no preservation • No facilities between Woolooga and Miva • Miva has reasonable access to major transport corridor (Bruce Highway 8km) 	<ul style="list-style-type: none"> • The rail corridor runs close to the Wide Bay Highway part of the way, and then deviates up to 15km away north. • Day use and overnight camping facilities near Miva on banks of Mary River. • Relative to Kingaroy to Murgon, this section is slightly more remote, so more careful planning required. • Day use and/or overnight facilities between Woolooga and Miva would enhance trail use, preferably Sexton- midway point • The presence of horse stalls and loading ramps close to Miva is yet to be confirmed • This section of the corridor is reasonably well suited to family trips- overnight walk, moderate-long cycle ride, long day horse ride or overnight ride (18km).

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Corridor section	Characteristics (landscape features and facilities)	Potential use issues
10 Miva- Theebine (5km)	<ul style="list-style-type: none"> • Undulating, flood plain flat • cleared areas dominant – a mix of cultivation and other agricultural use • crosses Mary River and floodplain • Rail heritage value: variable preservation of rail heritage (e.g. artefacts, some bridges, signals etc, some bridge structures proposed for removal) • Former siding structure at Dickabram - no preservation • Dickabram bridge- a feature of very high heritage interest • Country pub in Theebine- accommodation and meals • No other facilities. • No facilities between Miva and Theebine except camping site between Miva and Dickabram (Dickabram bridge over Mary River) • Theebine has reasonable access to major transport corridor (Bruce Highway 5km) 	<ul style="list-style-type: none"> • The presence of horse stalls and loading ramps close to Theebine is yet to be confirmed • Proposed future rail infrastructure facilities affecting last 1km of rail corridor require alternative trail alignment (Miva Road option) and investigation of alternative trail head- Gunalda or Gundiah • This section of the corridor is very well suited to family trips- short walk, cycle ride, or horse ride (5km).

Corridor section	Characteristics (landscape features and facilities)	Potential use issues
11 Theebine- Gunalda (7km) (Proposed Trail Link)	<ul style="list-style-type: none"> • Undulating, flood plain flat • cleared areas dominant – a mix of cultivation and other agricultural use • crosses Slaty Creek, tributary of the Mary River • Rail heritage values not relevant • Country pub at Gunalda- accommodation • Gunalda has few town facilities • Close proximity to major transport corridor (Bruce highway) and links north and south • No facilities between Theebine and Gunalda • Gunalda has good access to major transport corridor (Bruce Highway)- superior to Theebine 	<ul style="list-style-type: none"> • Corridor is well suited to family trips- short walk, short cycle ride, and short horse ride (7km). • Day use and overnight camping facilities near Miva, or accommodation at Theebine and Gunalda. • Gunalda is a superior trail head to Theebine- access to transport (Bruce Highway), range of facilities and superior to Gundiah- closer to southern users (Gympie/ Sunshine Coast) • The presence of horse stalls and loading ramps close to Gunalda is yet to be confirmed.

Corridor section	Characteristics (landscape features and facilities)	Potential use issues
12 Murgon- Byee (12km) (Proposed Trail Link)	<ul style="list-style-type: none"> • undulating • a mix of cleared areas, part cleared and intact forest, a mix of agricultural use • extensive areas of bushland adjacent to rail corridor • Rail heritage value: variable- some preservation of rail heritage , no station • No facilities between Murgon and Byee, no facilities at Byee • Byee has reasonable access to major transport corridor (Bunya Highway 11 km) 	<ul style="list-style-type: none"> • No destination attraction, day use or overnight camping facilities at Byee. Continue towards Proston or Boondooma Lake Caravan and Recreation Park recreation facility (long distance). • There are no horse stalls and loading ramps close to Byee • Return distance to Murgon is 22-24km – not suitable for a return day walk for families; trail link is well suited to medium cycle ride, medium horse ride (22-24 km).

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Corridor section	Characteristics (landscape features and facilities)	Potential use issues
13 Murgon-Cherbourg (6km) (Proposed Trail Link)	<ul style="list-style-type: none"> • undulating • cleared areas dominant, mixed agricultural use • extensive areas of bushland in Wondai State Forest/ Forest Reserve/ National Park/ Cherbourg Aboriginal Shire Council land adjacent to corridor (high ecological value) • Rail heritage values not relevant • No facilities between Murgon and Cherbourg • Cherbourg has some visitor facilities • Cherbourg has good access to major transport corridor (Bunya Highway 6 km) 	<ul style="list-style-type: none"> • Non-rail trail link follows Cherbourg Road- subject to traffic- suitability for family trips limited, suitability subject to road upgrade for cycling, walking, but not suitable for horse riding due to traffic. • short trip (6km). • No overnight camping facilities at Cherbourg, day use only • Views of Lake Barambah from scenic hilltop outlook, no direct access to lake (access via Murgon) • There are no horse stalls and loading ramps close to Cherbourg • Road traffic along road potentially unsafe for trail use. Potential for off-road trail loop to Murgon through bushland joining rail corridor 1.5 km south of Barambah Creek rail bridge (subject to detailed investigation and consultation with Cherbourg Council and community interests)

There is a wide range of non- rail infrastructure elements including accommodation, camping and day-use facilities in close proximity to or along the proposed KTRT and Trail Links which contribute to potential trail use and visitation. The absence of certain basic facilities such as provision of drinking water and toilets, significantly diminish recreation trail potential, including day use. The absence of certain other facilities such as food outlets or accommodation/ camping facilities may not affect day use but diminish visitation potential in other ways including limits to the conversion of day use to overnight use.

From experience in other settings, a remedy to the absence of such features can usually be identified, and this may represent a business opportunity for a local service provider or landholder. The preferred approach for the KTRT and one used in many other trail projects is to explore the pros and cons of private/ public partnerships so that both the public cost and the overall cost is minimised.

Non- rail infrastructure

Selected non- rail infrastructure items are considered to be of special interest to potential trail users. They act to create or enhance the role of locations as destination points. Their presence and relationship to towns, villages and former railway sidings, is shown in the following table:

Table 9.4: Non- rail Infrastructure (Selected Accommodation, Camping, and Day Use Facilities- Intra Corridor) Supporting the Proposed KTRT and Trail Links (Note: Equivalent data not available for each location)

Non-rail Infrastructure item	code	Non- rail Infrastructure item	code	Non-rail Infrastructure item	code
Water 1suitable for drinking 2 not suitable	Ws/ Wn	Camping/ caravan/campervan/trailer (Includes o'night stop)	C	Town facilities	Tf
Toilet	To	Food outlet	F	Horse facilities	Hof
Picnic table	P	Telephone	Te	Health facilities	Hef
Shelter shed	S	Accommodation	A	Swimming	Sw

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Railway station/ Siding/ Stop	Non-rail infrastructure (Potential recreation trail use)													
	Ws	Wn	To	P	S	C	F	Te	A	Tf	Hof	Hef	Sw	Distance (km) **
Yarraman (1)	*		*	*	*	*	*	*	*	*	*	X	*	-21/-46
Nanango (2)	*		*	*	*	*	*	*	*	*	*	*	*	-25
Kingaroy	*		*	*	*	*	*	*	*	*	*	*	*	0
Crawford		X	X	X	X	X	X	X	X	X	X	X	X	5/5
Memerambi		X	X	X	X	X	X	X	X	X	X	X	X	6/11
Wooroolin	*		*	*	*	*	*	*	X	X	X	X	X	5/16
Tingoora	*		*	*	X	*	*	*	*	X	X	X	X	6/22
Wondai	*		*	*	*	*	*	*	*	*	*	*	*	8/30
Murgon	*		*	*	*	*	*	*	*	*	*	*	*	13/43
Moondooner	X	?	X	X	X	X	X	X	X	X	X	X	X	8/51
Manyung	X	?	X	X	X	X	X	X	X	X	X	X	X	5/56
Goomeri	*		*	*	*	*	*	*	*	*	*	*	*	7/63
Kinbombi	X	?	X	X	X	X	X	X	X	X	X	X	X	7/70
Coleman	X	?	X	X	X	X	X	X	X	X	X	X	X	9/79
Cinnabar	X	?	X	X	X	X	X	X	X	X	X	X	X	7/86
Wygarr	X	?	X	X	X	X	X	X	X	X	X	X	X	2/88
Kilkivan	*		*	*	*	*	*	*	*	*	*	*	*	5/93
Mouingba	X	?	X	X	X	X	X	X	X	X	X	X	X	5/98
Bular	X	?	X	X	X	X	X	X	X	X	X	X	X	2/100
Oakview	X	?	X	X	X	X	X	X	X	X	X	X	X	4/104
Nondiga	X	?	X	X	X	X	X	X	X	X	X	X	X	
Woolooga	*		*	*	X	X	*	*	*	X	X	X	X	8/112
Boowoogum	X	?	X	X	X	X	X	X	X	X	X	X	X	5/117
Sexton	X	?	X	X	X	X	X	X	X	X	X	X	X	5/122
Miva	*		*	*	*	*	X	X	X	X	X	X	X	8/130
Dickabram	*		*	*	*	*	X	X	X	X	X	X	X	1/131
Theebine	*		*	X	X	X	*	*	*	X	X	X	X	3/134
Gunalda (3)	*		*	*	*	X	*	*	*	*	X	X	X	7/142
Barlil (4)	X	?	X	X	X	X	X	X	X	X	X	X	X	0/9
Byee (5)	X	?	X	X	X	X	X	X	X	X	X	X	X	3/12
Cherbourg (6)	*		*	*	*	X	*	*	X	*	?	*	*	0/6

** distances from (a) previous locality and (b) cumulative distance from Kingaroy, except for Barlil, Byee and Cherbourg (distance from Murgon)

1, 2, 3-Yarraman, Nanango and Gunalda are part of an extension of the KTrc (potential trail link)

4- Barlil and Byee are part of the Murgon to Byee Trail Link- a railway corridor spur line trail opportunity (potential trail link)

6- Cherbourg is part of the Murgon to Cherbourg Trail Link- a non- railway corridor trail opportunity (potential trail link)

Kingaroy	Potential overnight stopping points – Accommodation +/- camping
Miva	Potential overnight stopping points- No accommodation (camping only)
Coleman	Potential stopping points- No accommodation, no camping, day use only

Rail infrastructure

From various surveys of rail trail users' experiences, it is well established that rail heritage values, the range and condition of rail infrastructure elements such as platforms, bridges and tunnels, are a key to the success of rail trails. The most popular trails and trail sections are often those that have the best preserved rail heritage, regardless of other factors such as landscape characteristics and scenery.

A key attribute of the KTrc is the relatively intact condition of rail infrastructure. The rail heritage value of many parts of the nearby Brisbane Valley Rail Trail (BVRT), by comparison, is relatively poorer than the KTrc. Key sites of high heritage value include the century old Dickabram Bridge crossing the Mary River. This feature is arguably the most spectacular constructed feature along the whole corridor. A number of smaller bridges crossing minor waterways also add interest with the greatest number located between Kilkivan and Woolooga. The range of rail infrastructure items that remain is diverse. A detailed schedule of items has been prepared and is available from DSDIP and DTMR.

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The majority of former rail sidings are no longer recognisable and have very little remaining rail heritage value. Some of these localities may provide opportunities for interpretation through signage and reproduction of photographs incorporated with day use facilities.

Rail tunnels are a notable absence from the KTRC which reflects the alignment of the corridor avoiding escarpments or similar topographic features. Selected rail infrastructure items, including stations and platforms, switches, signals and signs, sheds and bridges. are identified in Table 9.4.

Table 9.4: Rail Infrastructure (Selected elements) Supporting the Proposed KTRT (A) and Trail Links (B) and rating of rail heritage

Infrastructure item	code	Infrastructure item	code	Infrastructure item	code	Infrastructure item	code
stations	st	goods sheds	go	tunnels	tu	sleepers*	sl
platforms	pl	sidings	sid	timber culvert	tc	rail	ra
switches	sw	timber bridges	tb	timber grids	tg	other	ot
Signals/ signs	si	steel bridges	sb	mile posts	mp		

* most sleepers and rail proposed for removal during salvage operations 2012-2013

	Rail Infrastructure Item																
Railway station/ Siding/ Stop and Section		st	pl	sw	si	go	sid	tb	sb	tu	tc	tg	mp	sl	ra	ot	Rating (H/M/L)
Yarraman and Y-Nanango	B	NA															NA NA
Nanango and N-Kingaroy	B	NA															H L
Kingaroy and K-Crawford	A		X	X									X	X	X		NA H
Crawford and C-Memerambi	A						X						X	X	X		L L-M
Memerambi and M-Wooroolin	A												X	X	X		L-M H
Wooroolin and W-Tingoora	A						X	X					X	X	X		M H
Tingoora and T-Wondai	A						X	X					X	X	X		M H
Wondai and W-Murgon	A	X	X					X					X	X	X		M H
Murgon and M-Moondooner	A	X	X					X					X	X	X		M M-H
Moondooner and M- Manyung	A							X					X	X	X		M L
Manyung and M- Goomeri	A							X					X	X	X		M L-M
Goomeri and G- Kinbombi	A	X	X	X				X					X	X	X		L-M L
Kinbombi and K-Coleman	A							X					X	X	X		NA NA
Coleman and C- Cinnabar	A							X					X	X	X		NA NA
Cinnabar and C-Kilkivan	A							X					X	X	X		H L
Kilkivan and K- Mouingba	A	X	X					X					X	X	X		NA H
Mouingba and M-Bular	A							X					X	X	X		L L-M
Bular and B-Oakview	A						X	X					X	X	X		L-M H
Oakview and O- Woolooga	A							X					X	X	X		M H
Woolooga and W- Boowoogum	A	X					X	X					X	X	X		M H
Boowoogum and B-Sexton	A							X					X	X	X		M H
Sexton and S-Miva	A							X					X	X	X		M M-H

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Miva and M-Theebine	A								X					X	X	X		M L
Theebine, T- Gunalda and Gunalda	B	NA																M L-M
Murgon-Byee	B						X	X										L-M L
Murgon-Cherbourg	B	NA																NA NA

Corridor Sections- Attractions to Potential Trail Users

A combining assessment of multiple attributes along the rail corridor such as natural landscape values, built landscape/ heritage values and non- rail infrastructure supporting recreation use, helps to understand a more complete picture of each section's likely attractions to potential trail users.

A combined assessment of such elements in each section of the corridor and an overall rating of each section is shown below in Table 9.5.

Table 9.5: Combined attribute assessment of section attractions and rating (natural/ cultural / other feature) of the proposed KTRT (Benarkin/ Blackbutt/ Yarraman to Gunalda) - -(1) Route and (2) Destination (L/M/H), (N-No, Y-Yes, NA- Not applicable)

Railway station/ Siding/ Stop and Section	Natural landscape Terrain Diversity (L/M/H)	Waterway Crossings/ exposure	Natural landscape Vegetation Cover diversity (L/M/H)*	Built landscape heritage (rail) (1) (L/M/H) (2) (L/M/H)	Built landscape heritage (non-rail) (1) (L/M/H) (2) (L/M/H)	Other (details)	Overall rating
Benarkin/ B' butt to Nanango	H	Y (1) N	H	NA NA	L H	M-H	H
Yarraman to Nanango	M	N N	H	H L	L H	M-H	M-H
Nanango to Kingaroy	L	Y (1) N	L-M	NA H	L M-H	L-M	L-M
Kingaroy to Wooroolin	M	N N	L-M	L L-M	L M	M	M
Wooroolin to Wondai	M	N N	M	L-M H	L H	M	M
Wondai to Murgon	M-H	Y (1) Y	H	M H	L H	M	M
Murgon to Goomeri	M	Y (3) N	M	M H	L H	M	M
Goomeri to Kilkivan	M-H	Y (5) Y	L-M	M H	L H	M	M
Kilkivan to Woolooga	M-H	Y (4) Y	M	M M-H	L M	M	M
Woolooga to Miva	M	Y(2) N	M-H	M L	L L	M-H	M-H
Miva to Theebine/ Gunalda	M	Y (1) **M N	M	M L-M	H M	M	M-H
Murgon to Byee	M	N Y(minor)	M-H	L-M L	L L	M	M
Murgon to Cherbourg	M-H	Y(1) N	M-H	NA NA	L M***	M	M

* may include native forest types/ plantations/ orchards/ cropping land

** Mary River

*** indigenous heritage not assessed

Corridor Sections- Opportunity for Recreation

The opportunity for recreation is also affected by factors which diminish or have the potential to diminish the overall quality of recreation experience by potential trail users. By further combining additional factors such as trail exposure to road noise and visual impacts, absence

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or presence of facilities and distance considerations, and the previous rating of section attractiveness (routes and destinations), an even more detailed picture recreation opportunity and potential emerges.

A combined assessment of such elements in each section of the corridor and an overall rating of each section is shown below in Table 9.6.

Table 9.6 Opportunity for recreation- day use (indicative and relative) –corridor and facilities between destinations/ start/ finish centres (km) and corridor (potential trail) section length rating [direction; Benarkin/ Blackbutt/ Yarraman to Gungalda] (N-No, Y-Yes, NA- Not applicable)]

Railway station/ Siding/ Stop and Section	Rail corridor	Travelling Stock Route	Minor Road	Road visual/ noise exposure level (H/M/L/VL) *	Facilities Day Use/ Camping/ Accom. (km from rail corridor)	Distance rating (Walking/ Cycling/ Horse Riding) (L/M/H)	Attraction rating (natural/ cultural / other feature) (1) Route (2) Dest. ** (L/M/H)	Overall recreation trail potential rating (L/M/H)	Ranking
Benarkin/ B' butt to Nanango	N	Y	Y	M-L-M	N Y N	M/L/M	M-H M-H	M	2
Yarraman to Nanango	N	Y	Y	M-L-M	N Y N	M/L/M	M-H M-H	M	2
Nanango to Kingaroy	N	N	Y	M-L-H	N N Y >3km	H/M/M	L-M M-H	L-M	3
Kingaroy to Wooroolin	Y	N	N	H-M-H	Y N N	L/L/L	M M-H	H	1
Wooroolin to Wondai	Y	N	N	H	Y Y Y	L/L/L	M M-H	H	1
Wondai to Murgon	Y	N	N	M-L-H	Y Y Y	L/L/L	M M-H	H	1
Murgon to Goomeri	Y	N	N	H-L-M	N N N	M/L/L	M M-H	H	1
Goomeri to Kilkivan	Y	N	N	M-L-M	N Y >3km N	H/M/M	M M-H	M	2
Kilkivan to Woolooga	Y	N	N	M-L	N Y >3km N	M/M/L	M M-H	M	2
Woolooga to Miva	Y	N	N	L	N Y N	M/L/L	M-H M-H	H	1
Miva to Theebine/ Gungalda	Y	N	Y	L-VL-L-M	N N N	L/L/NA	M H	H	1
Murgon to Byee	Y (p)	N	N	H-M-L	N N N	L/L/L	M L	L	4
Murgon to Cherbourg	N	N	Y	H-M-L	N N N	L/L/L	M L-M	L-M	3

*dominant levels along section

** Dest.=destination

Destination/ start/ finish centre codes: B/B- Benarkin/ Blackbutt, Y-Yarraman, N-Nanango, Kn-Kingaroy, Wr-Wooroolin, Ti-Tingoora, W-Wondai, M-Murgon, Go-Goomeri, KI-Kilkivan, WI-Woolooga, M-Miva, T-Theebine, Gu-Gungalda, By-Byee, C-Cherbourg

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10. Cost Estimates

10.1 Overview

Construction Staging

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.

To maximise the short-term benefits and utilise existing tourism infrastructure, it is recommended that the KTRT (Rail Trail) should be developed in the following stages:

- Stage 1: Kingaroy to Wondai
- Stage 2: Wondai to Murgon
- Stage 3: Murgon to Goomeri
- Stage 4: Goomeri to Kilkivan
- Stage 5: Kilkivan to Woolooga
- Stage 6: Woolooga to Theebine/Gunalda

More detailed comments regarding each stage of the KTRT (Rail Trail and Trail Links) are provided below.

Table 10.1 (a): Suggested construction stages- KTRT- Rail Trail

Stage	Section	Comment
1(a)	Kingaroy to Wooroolin	<ul style="list-style-type: none"> • The major cost in this section is the construction of trail-head facilities at Kingaroy Station. • This section of the railway corridor includes a part of the section within the urban parts of Kingaroy. It can provide commuter access for school and work use and for this reason should be sealed. It should also be a component of the local cyclist and pedestrian movement network. • A major cost in this section is the sealed surface – this cost is offset by the potential commuter and other local use. • This section does not provide for horses, unless special trail treatment alongside the commuter access is provided • There are no bridges • Other significant construction items are fencing and road crossing treatment at Wooroolin
1(b)	Wooroolin to Wondai	<ul style="list-style-type: none"> • The major cost in this section is the construction of trail- head facilities at Wondai Station. • This section of the railway corridor includes a part of the section within the urban parts of Wondai. It can provide commuter access for school and work use and for this reason should be sealed. It should also be a component of the local cyclist and pedestrian movement network. • A major cost in this section is the sealed surface – this cost is offset by the potential commuter and other local use • This section is relatively attractive with only one small bridge. • It passes through attractive rural scenery and the village of Tingoor. • It could provide for horses if special treatment alongside commuter access is provided. • Other significant construction items are fencing and road crossing treatment at Wondai.
2	Wondai to Murgon	<ul style="list-style-type: none"> • The major cost in this section is the construction of trail- head facilities at Murgon Station. • This section of the railway corridor includes a part of the section within the urban parts of Murgon. It can provide commuter access for school and work use and for this reason should be sealed. It should also be a component of the local cyclist and pedestrian movement network. • A major cost in this section is the sealed surface – this cost is offset by the potential commuter and other local use

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		<ul style="list-style-type: none"> This section is relatively attractive with only one bridge. It passes through attractive rural scenery, Wondai State Forest and Cherbourg aboriginal land. It could provide for horses if special treatment alongside commuter access is provided. Other significant construction items are fencing and road crossing treatment at Murgon.
3	Murgon to Goomeri	<ul style="list-style-type: none"> The major cost in this section is the construction of trail- head facilities at Goomeri Station. This section of the railway corridor includes a minor part of the section within the urban parts of Goomeri. It can provide limited commuter access for school and work use and for this reason should be sealed. It should also be a component of the local cyclist and pedestrian movement network. A cost in this section is the sealed surface – this cost is offset by the potential commuter and other local use This section is relatively attractive with three (3) bridges. It passes through attractive rural scenery. This section has important value for horses, special treatment alongside minor commuter section in Goomeri is required. Other significant construction items are fencing and road crossing treatment at Goomeri. The other major construction cost is work on the bridges
4	Goomeri to Kilkivan	<ul style="list-style-type: none"> The major cost in this section is the construction of trail- head facilities at Kilkivan Station, integrated with existing horse riding facilities. This section of the railway corridor includes a minor part of the section within the urban parts of Kilkivan. It can provide limited commuter access for school and work use and for this reason should be sealed. It should also be a component of the local cyclist and pedestrian movement network. A cost in this section is the sealed surface – this cost is offset by the potential commuter and other local use This section is attractive with five (5) bridges. It passes through attractive rural scenery, with many tight bends between Kinbombi and Coleman former rail sidings. This section is very important for horses, special treatment alongside minor commuter section in Kilkivan is required. Other significant construction items are fencing and road crossing treatment at Kilkivan and Kilkivan- Tansey Road crossing. The other major construction cost is work on the bridges
5	Kilkivan to Woolooga	<ul style="list-style-type: none"> The major cost in this section is the construction of trail- head facilities at Woolooga Station. This section is attractive with four (4) bridges. It passes through attractive rural scenery, with many winding sections. This section is very important for horses. Other significant construction items are fencing and road crossing treatment at Woolooga. The other major construction cost is work on the bridges
6(a)	Woolooga to Miva	<ul style="list-style-type: none"> This section is attractive with two (2) bridges. It passes through attractive rural scenery, ending at the Dickabram Bridge over the Mary River. This section is very important for horses; special treatment crossing for the Dickabram Bridge is required. Other significant construction items are fencing and road crossing treatment at Miva Road crossing. The other construction cost is work on the bridges.
6(b)	Miva to Theebine	<ul style="list-style-type: none"> It passes through attractive rural scenery. Gunalda is less suitable for horses than Theebine. The main construction cost is work on a trail head at Theebine set back from proposed QR facilities.

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Table 10.1 (b): Suggested construction stages- KTRT Trail Links

Stage	Section	Comment
1	Benarkin/ Blackbutt to Nanango (trail link)	<ul style="list-style-type: none"> The major cost in this section is the construction of trail- head facilities at Nanango, integrated with horse riding facilities. This section of the trail link includes a minor part of the section within the urban parts of Nanango. Detailed design investigations are required. It may also be a component of the local cyclist and pedestrian movement network. A cost in this section is the sealed surface – this cost is offset by the potential commuter and other local use It passes through attractive rural scenery linked to the Bicentennial National Trail. This section is very important for horses, special treatment alongside minor commuter section in Nanango is required or separation and termination for horse use outside the town area. Other significant construction items are road crossing treatments at Nanango.
1	Yarraman to Nanango (trail link)	<ul style="list-style-type: none"> As for Benarkin/ Blackbutt to Nanango section.
1	Nanango to Kingaroy (trail link)	<ul style="list-style-type: none"> Significant construction items are road crossing treatments at Nanango. This section of the trail link includes a minor part of the section within the urban parts of Kingaroy. Detailed design investigations are required. It may also be a component of the local cyclist and pedestrian movement network. Detailed design is required. Parts of this section may also be a component of the local cyclist and pedestrian movement network. A cost in this section is the sealed surface – this cost is offset by the potential commuter and other local use
4	Murgon to Cherbourn (trail link)	<ul style="list-style-type: none"> Significant construction items is road crossing treatment near Murgon. Parts of this section within Murgon may also be a component of the local cyclist and pedestrian movement network. A cost in this section is the sealed surface – this cost is offset by the potential commuter and other local use
6	Murgon to Byee (trail link)	<ul style="list-style-type: none"> Significant construction items are road crossing treatments at Nanango. This is a very challenging section to design and construct where it passes through a former industrial site (meat works), Detailed design is required. Parts of this section may also be a component of the local cyclist and pedestrian movement network. A cost in this section is the sealed surface – this cost is offset by the potential commuter and other local use Major challenge to extend beyond Byee- dwellings and other infrastructure close to old rail easements
6	Theebine to Gunalda	<ul style="list-style-type: none"> It passes through attractive rural scenery. Gunalda may be less suitable for horses than Theebine. The main construction cost is work on a trail head at Gunalda.

10.2 A Note on Cost Estimates

Part of the process of establishing the business case is determining the likely project costs. It is reasonably straightforward to set out the actual costs of developing a recreational trail, as the cost components are mostly known, and per unit rates can be applied. In particular, trail surfacing costs for the KTRT should be minimal. This is because the sections where corridor works have been completed appear to be readily suitable for recreation use with only minor additional work required. This is based on selected site inspections as of June 2012.

In considering the costs detailed in this report reference should be made to their limitations as estimates only, but consistent with well established practice. Should the project proceed, the detailed design development would define more accurately the trail construction costs.

10.3 Section Costs

The section cost estimates are based on recent relevant construction costs from other trail projects. The project costs at the time of detail design and construction 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.

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The preliminary estimated costs for each of the proposed six stages of the rail corridor are based on expert advice from officers of the Queensland Government with local and international experience in trail development.

Indicative (preliminary) costings per kilometre have been used to develop trail construction cost estimates as follows:

- \$30,000 per kilometre- where there the number of bridges is low (<1 per 5km)- low bridge refurbishment cost component
- \$40,000 per kilometre- where the number of bridges is higher (> 1 per 5km)- medium bridge refurbishment cost component. The calculated costs are shown below:

Table 10.1: Indicative (preliminary) costs – KTRT sections and Trail Links

Stage	Section	Distance	Calculation	Cost
Stage 1	Kingaroy to Wondai	30 km	30 km @\$30k/ km	\$900,000
Stage 2	Wondai to Murgon	13 km	13 km @\$30k/ km	\$420,000
Stage 3	Murgon to Goomeri	20 km	20 km @\$30k/ km	\$600,000
Stage 4	Goomeri to Kilkivan	30 km	30 km @\$40k/ km	\$1,200,000
Stage 5	Kilkivan to Woolooga	19 km	19 km @\$40k/ km	\$760,000
Stage 6	Woolooga to Theebine/ Gunalda	22 km	22 km @\$30k/ km	\$660,000
Sub-Total	NA	134 km	NA	\$4,540,000
	Trail Links	80 km (approx.)	80km @ \$12k/ km (variable)	\$1,000,000
Total	NA	214 km (approx)	NA	\$5,540,000

Estimated Total cost of Sections 1-6 (Rail Corridor): **\$4,540,000- \$5,000,000 (+/-10%)**

Estimated Total cost of Trail Links : **\$1,000,000-\$1,100,000 (+10%)**

Estimated Total cost of Rail Corridor and Trail Links: **\$5,540,000-\$6,100,000 (+/-10%)**

10.4 Trail Maintenance Costs T Secluding GST) \$5,752,730

The annual maintenance costs for the trail will be in the order of \$200,000, with potential savings after 5-10 years due to various establishment factors. It is also identified that SBRC and GRC may decide on the need to hire a full-time trail manager (at a cost of \$100-120,000/year, including additional resource costs) both for trail management and provide a point of contact for the community on trail related issues. Recruitment of a trail manager is expected to reduce some of the annual maintenance cost listed above. This is also recommended to assist in addressing some community concerns, notably the enforcement of trail bike exclusion and the desire for a single contact within Council (or Councils) for the community.

The opportunity exists to minimise future maintenance requirements through careful planning and construction. Construction of high quality trails during initial works is the best way of minimising future problems and maintenance costs.

11. The Business Case

11.1 Introduction

Annual expenditure figures from other recreation trail studies in Australia and overseas provide some insight into predicting the economic impact of a new long-distance recreation trail such as the KTRT. The pattern for new trails, including rail trails, is for annual visitor numbers and length of visit to grow steadily during and after an initial establishment period, with overall visitor expenditure reflecting a mix of factors. The increase in annual expenditure (primarily accommodation and meals) can be partly explained by demand for longer and richer trail experiences.

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This includes repeat visits by the same users as new trail sections are completed and opened. The development of the business case has incorporated an assessment of projected-use scenarios along with project costs and benefits.

11.2 Population and Visitor Information – A Summary

The known and estimated numbers of visitors to local attractions is a useful starting point for predicting likely economic impacts of new initiatives such as the KTRT. The following data are based on estimates provided by SBRC officers and representatives of other organisations considered to have expert knowledge of local visitation patterns.

Table 11: South Burnett Local Attractions (complementary to KTRT) and Estimated Annual Visitor Numbers- Current and Projected

Attraction	A Estimated annual visitor numbers current (2012)	B Estimated annual visitor numbers predicted (2017)	C Estimated annual visitor numbers predicted (2022)	Sources of data/ estimates*
Bjelke-Petersen Dam Visitor & Recreation Park	55,000+	65,000	70,000	SBRC Tourism http://www.fishingmonthly.com.au/Articles/Display/11817-Sensational-South-Burnett
Lake Boondooma Caravan and Recreation Park	60,000	70,000	100,000	SBRC estimate
Ficks Crossing	N/A	N/A	N/A	
Gordonbrook Dam Recreation Area	N/A	N/A	N/A	
Markets along or close to KVRT	1,800	2,000	2,500	Estimate by Anthony White – contact for Blackbutt Markets
Nanango Country Markets (close to KTRT)	24,000	28,000	30,000	SBRC estimate
Murgon CBD Markets	2,400	3,600	4,200	SBRC estimates
Kingaroy Friendship Markets	3,000	3,600	4,200	Estimate by Doug Henderson – contact for Kingaroy Markets
Wondai Country Markets	900	1,800	3,600	Estimate by Elaine Madill – contact for Wondai Markets
Kilkivan Markets	N/A	N/A	N/A	
Hivesville Country Markets	1,200	1,800	2,400	SBRC estimate
Kumbia Market	600	650	575	Estimate by Anne Biel – Contact for Kumbia Markets
South Burnett Region Timber Industry Museum Complex	14,500	16,000	20,000	SBRC estimate
Kingaroy Heritage Museum	7,000	9,000	12,000	SBRC estimate
Wondai Heritage Centre	1,200	1,500	1,600	SBRC estimate
Dairy and Heritage Museum	500	700	800	SBRC estimate
Boondooma Historical Homestead	2,000	2,500	3,000	SBRC estimate
Ringsfield House Historical Complex	1,000	1,100	1,300	SBRC estimate

* data and estimates provided by SBRC June 2012

This summary shows a predicted growth in visitation to most local attractions in excess of 30-40% over the 10 year period from the present (2012) to 2022.

Other key attractions in the SBRC area such as the Bunya Mountains National Park, and major annual events in the GRC area such as the Kilkivan Great Horse Ride are also predicted to enjoy significant growth in visitation. These are considered supporting factors when preparing projected usage scenarios for the KTRT.

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11.3 Projected Usage Scenarios

Local Usage – South Burnett (Nanango, Kingaroy, Wondai and Murgon).

In order to predict likely economic impacts arising from a rail trail use or any new recreation and tourism project, the first step is to estimate potential local usage. Local usage is a factor – a resident population of over 33,406 as at 30 June 2011. Excluding residents living more than 30 minutes from the KTRT (mainly residents living outside the larger town centres), the resident population in close proximity to the KTRT is approximately 20,000 people, and is a significant local catchment of potential users. In the case of the Mundaring Shire trail network in Western Australia (discussed in Section 5 and Appendix 3), 63% of Shire residents had used the network in the previous 12 months. The KTRC has existed since 1915, and therefore would be well-known to local residents.

It is worth noting that calculations that follow are based on local residents using existing connections or driving to Kingaroy or any of the towns and villages along the trail. The development of a shared use path between the BVRT terminus at Yarraman and Nanango, Nanango to Kingaroy as well as Wondai to Murgon Trail allowing easy access for South Burnett residents is discussed later.

Gympie can also be considered a “local market” being within 30 minutes drive of Theebine/Gunalda (the same distance as the Perth metropolitan area to Mundaring Shire in W.A.). The potential impacts of the Gympie user market are considered separately.

It is assumed that a new resource such as the KTRT is going to be attractive to residents as it represents an activity previously not possible in the local situation, although it is recognised that the BVRT terminating at Yarraman is also attractive, and accessible to local residents of South Burnett Region.

Table 11.1 provides three possible use scenarios, all of which are conservative compared with the Mundaring, (Western Australia) data. (Population of the areas of interest sources: WBB Regional Plan and ABS statistics (derived numbers) : 20,000)

Table 11.1: Potential Trail Usage by South Burnett (Nanango, Kingaroy, Wondai and Murgon) residents (estimated population 20,000)

	Use rate	Numbers of users
Low	10%	2000
Medium	20%	4000
High	30%	6000

The next step is to estimate total trip numbers. In the Mundaring (WA) study, the average number of trips per year per local resident was 75. Table 11.2 provides three visitation scenarios taking a conservative approach compared to the actual visitation rate coming from the Mundaring study.

Table 11.2: Potential Total Annual Visits by South Burnett residents
(low, medium and high refer to the use rates developed in table 11.1 above)

	Low trail usage : 10% of residents	Med trail usage : 20% of residents	High trail usage : 30% of residents
Low (10 visits/yr)	20,000	40,000	60,000
Medium (20 visits/yr)	40,000	80,000	120,000
High (30 visits/yr)	60,000	120,000	180,000

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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) are a legitimate base to work from. Using an adapted figure (\$2.00) in combination with visitation scenarios generated in Table 11.2 gives a range of expenditure estimates (Table 11.3).

Table 11.4: Potential Total Annual Expenditure by South Burnett residents
(low, medium and high refer to the use rates developed in tables 11.2 and 11.3 above)

Trail usage	# of trips	# of visits	\$/trip	Total spend (\$)
Low	Low	20,000	2.00	40,000
Low	Med	40,000	2.00	80,000
Low	High	60,000	2.00	120,000
Medium	Low	40,000	2.00	80,000
Medium	Medium	80,000	2.00	160,000
Medium	High	120,000	2.00	240,000
High	Low	60,000	2.00	120,000
High	Medium	120,000	2.00	240,000
High	High	180,000	2.00	360,000

These figures are comparable to the Mundaring results which delivered a total expenditure of \$2.25 million in the Shire by local residents (part, but not all, of this can be accounted for by the varying local population sizes). In order to simplify the number of outcomes, three scenarios are presented: low usage / low number of trips, medium usage / medium number of trips, and high usage / high number of trips:

Table 11.4: Summary- Potential Total Annual Expenditure by South Burnett residents
(low, medium and high refer to the use rates developed in tables 11.1, 11.2 and 11.3 above)

Use Scenario	Total spend (\$)
Low/ low	40,000
Medium/ medium	160,000
High/ high	360,000

Local Usage- Gympie (Gympie region and town)

Gympie region and town can also be considered a "local market" being within 30 minutes of Gunalda or Theebine at the northern end of the KTRT (the same distance as Perth metropolitan area to Mundaring Shire). It is treated separately from South Burnett for ease of illustration. Excluding residents living more than 30 minutes from the KTRT, the resident population in close proximity to the KTRT is estimated at 25,000 people, and is a significant local catchment of potential users.

Table 11.5: Potential Trail Usage by Gympie residents
(estimated population of 50,000)

Trail usage	Use rate	Numbers
Low	10%	5,000
Medium	20%	10,000
High	30%	15,000

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 11.6 provides three visitation scenarios taking a more conservative approach compared to the actual visitation rate coming from the Mundaring study. This approach takes into account the relatively greater distance from Gympie to the Theebine end of the KTRT than the distance from the South Burnett towns between Kingaroy and Murgon on or near the KTRT.

Table 11.6: Potential Total Annual Visits by Gympie residents

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(low, medium and high refer to the use rates developed in table 11.5 above)

	Low trail usage : 10% of residents	Med trail usage : 20% of residents	High trail usage : 30% of residents
Low (5 visits/yr)	25,000	50,000	75,000
Med (10 visits/yr)	50,000	100,000	150,000
High (15 visits/yr)	75,000	150,000	225,000

Again, 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. Locals from urban Gympie may spend more given it is more likely to be a longer trip, but the Mundaring figures are used to provide a conservative scenario. The expenditure figures from the Mundaring study (\$1.44/person/trip, 2001 figures) are a legitimate base to work from when compared to overseas figures. Using this figure in combination with visitation scenarios generated in Table 11.6 gives a range of expenditure estimates (Table 11.7).

Table 11.7: Potential Total Annual Expenditure by Gympie residents
(low, medium and high refer to the use rates developed in tables 11.5 and 11.6 above)

Trail usage	# of trips	# of visits	\$/trip	Total spend
Low	Low	25,000	2.00	50,000
Low	Med	50,000	2.00	100,000
Low	High	75,000	2.00	150,000
Med	Low	150,000	2.00	100,000
Med	Med	100,000	2.00	200,000
Med	High	150,000	2.00	300,000
High	Low	75,000	2.00	150,000
High	Med	150,000	2.00	300,000
High	High	225,000	2.00	450,000

In order to simplify the number of outcomes, three scenarios are presented: low usage / low number of trips, medium usage / medium number of trips, and high usage / high number of trips:

Table 11.8: Summary- Potential Total Annual Expenditure by Gympie residents
(low, medium and high refer to the use rates developed in tables 11.5 and 11.6 above)

Use Scenario	Total spent (\$)
Low/ low	50,000
Medium/ medium	200,000
High/ high	450,000

Visitation – Northern SEQ (Sunshine Coast, Moreton Bay, Brisbane northside, Ipswich) residents

The figures above do not include overnight visitors. The combined population of South Burnett Region reaches 25-35,000 in peak visitor times (some 10-15,000+visitors - Country Tourism, Queensland Parks and Wildlife Service, personal communication). In South Burnett, the major destinations include Bunya Mountains National Park, Bjelke-Petersen Dam/ Lake Barambah and Boondooma Lake. The previous table of local attraction visitor numbers provides an indication of estimated visitor numbers to the South Burnett and Gympie regions.

In the Gympie Region, the Cooloola Coast, Rainbow Beach, Tin Can Bay coastal settings are the primary tourist destinations and attract more than 100,000 visitors annually. Special attractions such as the “Gympie Rattler” historical steam train experience also attract

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significant numbers of day and overnight visitors. Additionally, significant numbers of tourists travel north from Brisbane to Hervey Bay, an area promoted as the “whale watching capital of Australia”, as well as nearby Fraser Island. It is reasonable to conclude that a portion of these visitors could be attracted to divert inland to the South Burnett either en-route travelling north from Brisbane, or on the return leg of the journey, and use sections of the KTRT while passing through and extend their stay in the Gympie and South Burnett regions.

It is also reasonable to conclude that visitors will come to the area specifically to use the trail, and will stay overnight, building the trail into a weekend visit. Given the length of the proposed trail and the distance from Brisbane, the major generator of tourists, this is a realistic situation.

There is insufficient data available on visitors to undertake a comprehensive analysis of likely economic impacts. However based on comparisons with the Riesling Trail in South Australia are instructive and may provide some forecasts as to additional visitor expenditure from trail development.

The Riesling Trail is some 2 hours from Adelaide in the Clare Valley – an overnight trip. By comparison, Kingaroy is around 3 hours from Brisbane and Theebine/ Gunalda is just under 2.5 hours from Brisbane/ Greater Brisbane which is a much bigger city than Adelaide (>2 million compared to 1.09 million). Visiting trail users spend \$215.82/person/visit in the Clare Valley. The net effect of this expenditure is that visitors who come to the Clare Valley primarily to use the Riesling Trail (46% of users) are estimated to spend \$1.08 million/year. The average length of stay is 2.2 days (giving a daily expenditure of \$98.10).

The combination of Food and Wine Tourism and cycle tourism is a successful mix in the Clare Valley. The South Burnett has an emerging Food and Wine Tourism industry and there is no reason why its integration with cycle tourism could not be as successful as the Clare Valley. It is reasonable therefore, to suggest visitors from Brisbane would have a similar profile of expenditure. For the purposes of this study, the estimated daily expenditure figure has been adjusted to \$125 to account for inflation. Note also that the trail use rates for Northern SEQ have been set at one quarter of the use rate for the South Burnett and Gympie populations due to the increased distance and travel time factor.

Table 11.9: Potential Trail Usage by Northern SEQ (Sunshine Coast, Moreton Bay, Brisbane north side, Ipswich) residents
(estimated population of 800,000)

Trail usage	Use rate	Numbers of users
Low	2.5%	20,000
Medium	5.0%	40,000
High	10%	80,000

The next step is to estimate total trip numbers. In the Mundaring, Western Australia study, the average number of trips per year per local resident was 75. Table 11.2 provides three visitation scenarios taking a conservative approach compared to the actual visitation rate coming from the Mundaring study.

Table 11.10: Potential Total Annual Visits by Northern SEQ (Sunshine Coast, Moreton Bay, Brisbane north side, Ipswich) residents
(low, medium and high refer to the use rates developed in table 11.9 above)

	Low trail usage 2.5-10% of residents	Med trail usage 5-20% of residents	High trail usage 10-30% of residents
Low (1 visits/yr)	20,000	40,000	80,000
Medium (2 visits/yr)	40,000	80,000	160,000
High (3 visits/yr)	60,000	120,000	240,000

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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) are a legitimate base to work from. Using an adapted figure (\$1.50) in combination with visitation scenarios generated in Table 11.2 gives a range of expenditure estimates (Table 11.3).

Table 11.11: Potential Total Annual Expenditure by Northern SEQ (Sunshine Coast, Moreton Bay, Brisbane north side, Ipswich) residents
(low, medium and high refer to the use rates developed in tables 11.9 and 11.10 above)

Trail usage	Number of trips	Number of visits	\$/trip	Total spend (\$)
Low	Low	20,000	25.00	500,000
Low	Med	40,000	25.00	1,000,000
Low	High	60,000	25.00	1,500,000
Medium	Low	40,000	25.00	1,000,000
Medium	Medium	80,000	25.00	2,000,000
Medium	High	120,000	25.00	3,000,000
High	Low	80,000	25.00	2,000,000
High	Medium	160,000	25.00	4,000,000
High	High	240,000	25.00	6,000,000

These figures are considerably lower than the Mundaring results which delivered a total expenditure of \$2.25 million in the Shire by local residents (part, but not all, of this can be accounted for by the varying local population sizes). In order to simplify the number of outcomes, three scenarios are presented: low usage / low number of trips, medium usage / medium number of trips, and high usage / high number of trips:

Table 11.12: Summary-Potential Total Annual Expenditure by Northern SEQ (Sunshine Coast, Moreton Bay, Brisbane north side, Ipswich) residents
(low, medium and high refer to the use rates developed in tables 11.9, 11.10 and 11.11 above)

Use Scenario	Total spend (\$)
Low/ low	500,000
Medium/ medium	2,000,000
High/ high	6,000,000

The combination of total annual visits for South Burnett, Gympie and Northern SEQ sectors provides an overall picture of potential annual visits by combined population sectors.

Table 11.13: Potential Total Annual Visits- Combined
(low, medium and high refer to the use rates developed in tables above)

	Low scenario	Med scenario	High scenario
South Burnett	20,000	80,000	180,000
Gympie	25,000	100,000	225,000
Northern SEQ	20,000	80,000	240,000
Combined	65,000	260,000	645,000

This picture of potential annual visitation provides the basis for calculating potential combined total annual expenditure, using different levels of expenditure for different population/ visitor , sectors, ranging from \$2- \$25 per person per day.

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Table 11.14: Potential Total Annual Expenditure- Combined (day trips)

	Low scenario Total spend (\$)	Med scenario Total spend (\$)	High scenario Total spend (\$)
South Burnett	40,000	160,000	360,000
Gympie	50,000	200,000	450,000
Northern SEQ	500,000	2,000,000	240,000
Combined	590,000	2,360,000	6,000,000

The mid point between the low scenario (\$590,000) and the medium scenario (\$2,360,000) for total spend annually is \$1.5 M dollars. This is considered a very conservative approach to assessing the most likely total spend.

11.4 Converting Day Trips to Overnight Trips

Converting a small percentage of these day trips and day trip expenditure numbers to overnight trip and overnight trip expenditures rapidly increases the level of potential total expenditure.

By calculating the additional expenditure arising from a percentage of overnight use, the most complete picture of total spend can be calculated. The figure of 80,000 annual visits used in the scenario below relates to Northern SEQ Medium trail use and Medium number of visits annually.

Table 11.15: Potential Total Annual Expenditure- Combined (day trips and overnight trips)

Use Scenario (Med trail usage/ med number of visits)	Total spend (\$)
Total annual expenditure- Combined (day use)	\$2,360,000 (\$2.36M)
Overnight Use (Northern SEQ) Low *	10% of 80,000 people= 8,000 people @ \$125 @ 1night=\$1.0M
Overnight Use (Northern SEQ) Med	15% of 80,000 people= 12,000 people @ \$125 @2 nights=\$3.0M
Overnight Use (Northern SEQ) High	20% of 80,000 people= 16,000 people @ \$125 @ 3 nights= \$6.0M
Combined Day Use and Overnight Use Low	\$2.36+ \$1.0M= \$3.36M
Combined Day Use and Overnight Use Med	\$2.36+ \$3.0M= \$5.36M
Combined Day Use and Overnight Use (High)	\$2.36M+\$6.0M= \$8.36M

*10% of day trips, 1 night, \$125/ night

**20% of day trips, 2 nights, \$125/ night

*** 30% of day trips, 3 nights, \$125/ night

11.5 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 considered to be achievable for the trail:

- Significant local use – over 20,000 local users/year is a reasonable expectation. This will result in an economic injection of \$40,000/year;
- Expansion of the existing day-tripper market to the region. 20,000 day trippers/year will yield an injection of \$500,000/year (under a medium expenditure scenario);
- Expansion of the existing overnight visitor market to the region. If the trail attracts 1,500 overnight visitors/year, the economic injection is likely to be \$250,000-300,000. It should be realised that such visitor numbers may not be achieved in the first 5 years of operation;
- The total injection of dollars into the local economies from local, day-trip and overnight visitors may be of the order of \$1 million per year by year 5 or 6 (under a range of conservative scenarios).

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It should be emphasised that user and visitor numbers will not necessarily be realised in the first years of operation if the trail proceeds (particularly if the trail is constructed in sections).

11.5 Overview of Benefits and Costs

Trail development brings with it a number of benefits and costs. The costs and benefits of the project has been assessed however there is no definitive benefit-cost ratio or dollar figure as there are too many unknown and generally unquantifiable factors.

The economic benefits to the region include:

- Direct economic benefits from trail development and operation;
- Health related benefits to the wider community through active recreation participation of a safe trail environment;
- quantifiable community benefits such as improved commuter cycling movement;
- 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; and
- Trails help to connect people and places and to develop community pride and help to preserve natural and cultural values. They can help build social capital.

The economic costs to the community include:

- Direct economic costs;
- Non-quantifiable costs to the community - trails development may in fact divide communities (as well as unite them) between those who will benefit and those who believe they will accrue the costs;
- There may be stress-related health issues for adjoining landholders - these issues may arise during construction and upon commencement of rail trail operations;
- There will be short-term impacts during construction. These are likely to include noise pollution (from rail removal in particular), and disturbance of livestock, landholders, farming practices and wildlife;
- Possible economic costs to adjoining landholders such as possible increased insurance premiums due to perceived higher risks of fire, theft and public liability (such increases depends on landowner and insurance assessment of risk); and
- Opportunity Costs - the cost of money invested in one project rather than in another. Much of the money that will be spent on this project, should it proceed, will not be available for other types of projects

In summary, with the right marketing, the rail trail could attract significant numbers of new users and visitors to the South Burnett and Gympie regions and attract significant expenditure arising from that level of visitation.

Even a low (10% of the population making 10 visits/ year) local use scenario for residents of South Burnett and Gympie is easily achievable and would yield around 14,000 trail uses/ year. Such a scenario would yield additional economic benefits of between \$28,000 and \$350,000/ year, depending on level of spend for day use.

Increasing the number of visitors from northern SEQ/ Greater Brisbane is achievable. Given the success of the Bibbulmun Track in W.A. and its marketing campaigns, there is no reason to expect that visitor numbers to the KTRT will not increase with the right marketing. It is difficult to forecast the economic impacts of any increased visitor usage – daily expenditure of around \$100-\$150 would yield significant economic benefits to the local economy with even a low increase in visitor numbers as a result of trail development.

The KTRT would be a good inclusion in a package with other tourist attractions. Such a package makes an appealing weekend away. Good marketing of such a package would mean that the number of overnight stays in the region would increase accordingly. This has a significant economic impact and benefits, as people who stay overnight spend considerably more than those who come for a day only. With such an outcome, the economic benefits estimated above would only be a small part of a significant overall economic benefit to the region.

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The South Burnett is gaining prominence as a wine growing region, and accounts for a significant proportion of Queensland wine production. The wine trail promoted in the region, with its associated signage, provided an easy to follow path to the wineries.

Wine tourism encompasses a wide range of experiences built around tourist visitation to wineries and wine regions. This includes wine tasting, enjoyment of wine and food, the exploration of regional environments and the experience of a range of cultural, nature based and lifestyle activities.

The region is somewhat distant from Brisbane to allow for a day trip incorporating a number of winery visits, and therefore accommodation is a priority. The region currently has few other key attractions, which does not encourage lengthy stays. There should be good potential to capitalise on the proximity to the Bunya Mountains, or promote the Bjelke Petersen Dam/ Lake Barambah more effectively.

A conservative estimate of outcomes suggests that the KTTRT has the potential to attract significant levels of use estimated at 50,000 trail users/visitors per year within 10 years, expanding to 70,000 trail users/visitors per year within 15 years.

Expenditure and Costs, Cost- Benefit relationship

The relationship between expenditure by trail users/ visitors and costs of trail development is predicted to change from net cost (costs exceed expenditure) to net gain (expenditure exceeds costs) over time. An indicative scenario of expenditure and costs (annual and cumulative) for each of the first 10 years, and summary outcomes of cost/ benefit for years 10 and 15 are shown below to illustrate this.

Under this scenario, in the first 4 years the costs exceed expenditure (highlighted red). The first year when annual expenditure exceeds costs is year 5, but cumulative costs exceed cumulative expenditure until year 8 (highlighted yellow). The first year when **cumulative expenditure** exceeds **cumulative costs** (overall net gain) is year 9, and this continues for subsequent years (highlighted green). Expenditure increases to \$30M in response to an increase in overnight stays. The **cumulative** cost/ benefit figure of approximately \$1.9M increases to nearly \$20M in the 6 years to year 15.

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**Table 11.16: Potential Expenditure, Cost, and Cost/ benefit (annual and cumulative)-
Tears 1-10 and Year 15.**

Year	(\$M) Expend- iture (trail users)	(\$M) Cost (trail devt.)	(\$M) Cost/ benefit	Cost/ benefit	(\$M) Expend- iture- cumulative	(\$M) Cost- cumulative	(\$M) Cost/ benefit- cumulative	Cost/ benefit- cumulative
1	0.0	0.7	- 0.7	Net cost	0.0	0.7	-0.7	Net cost
2	0.2	0.7	- 0.5	Net cost	0.2	1.4	-1.2	Net cost
3	0.4	0.7	- 0.3	Net cost	0.6	2.1	-1.5	Net cost
4	0.6	0.7	-0.1	Net cost	1.2	2.8	-1.6	Net cost
5	0.8	0.7	1.0	Net benefit	2.0	3.5	-1.5	Net cost
6	1.1	0.7	0.4	Net benefit	3.1	4.2	-1.1	Net cost
7	1.4	0.7	0.7	Net benefit	4.5	4.9	-0.4	Net cost
8	1.7	0.7	1.0	Net benefit	6.2	5.6	-0.6	Net cost
9	2.0	0.7	1.3	Net benefit	8.2	6.3	1.9	Net benefit
10	2.3	0.7	1.6	Net benefit	10.5	7.0	3.5	Net benefit
1-10	NA	NA	NA	NA	10.5	7.0	3.5	Net benefit
15	5.0	0.7	4.3	Net benefit	30	10.5	19.5	Net benefit
1-15	NA	NA	NA	NA	30	10.5	19.5	Net benefit

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12. Feasibility Study Recommendations

12.1 Introduction

An objective of this business case is to consider the range of factors affecting the success of the project and provide recommendations that would produce the greatest positive benefits for the broadest cross-section of the community. The business case considers not only the project costs but also the relationship between costs and benefits.

Given the extensive range of information available on rail trails in Australia (in particular Victoria, Tasmania, Western Australia and South Australia) and overseas, this study has made use of published material to assist in determining whether the development of a recreation pathway along the KTRc is feasible.

To establish whether the proposed trail has a positive business case, this study sought to answer several questions:

Question Response

Is there a market for the proposed trail?

Yes. It is likely that the proposed rail trail (and links) between Yarraman and Theebine/Gunalda will become an addition to the suite of recreation trails available to those who actively seek out these recreational opportunities.

Is there a supportive local government?

Yes and No. SBRC is strongly supportive; GRC is not supportive at the time of writing (June 2012). The Business Case contained in this report provides a basis by which Council will make a decision as to whether it is supportive.

Is there supportive/strong advocates?

Yes. Bicycle Queensland group is very pro-active and supportive of the project. DTMR is strongly supportive of the proposal. Under the new policy direction of the State Government, DSDIP will have little or no role in the future of the proposal.

Is there a supportive community?

Largely unknown but the proposed KTRT is likely to be supported by a significant proportion of the local communities. There is very strong community and business support for the BVRT from nearby communities of Blackbutt and Benarkin.

What is the user experience (terrain/landscape/history)?

The experience to be gained by users on the proposed rail trail would be varied. The topography is undulating; the landscape is varied. The history and stories attached to various places are well documented and have great potential for engaging interest of users and visitors.

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 through which they pass.

Is there a commitment to maintenance?

Yes, for the SBRC section by SBRC only. There is no commitment for the balance area by GRC.

Will the trail provide a high-quality experience?

Yes, to some extent. There is no comparable rail-trail in Queensland except the BVRT, to which it is connected by "trail links". The KTRT is superior to the BVRT and possibly many other examples, in its capacity to:

- link more sizable and interesting human settlements and the communities they support
- showcase a greater diversity of landscapes, more intact rail heritage and other attributes recognised for their state, national and international heritage value.

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- connect other regional trails as part of a long distance “Great Trails” concept extending across the regions of SEQ and WBB.

In summary, it is considered that the KTRT represents a premium tourism and outdoor recreation opportunity, not only for the region but also the State of Queensland.

Estimated construction costs for trail sections other than those in the principal cycle network = \$5-7million over 10 years (\$500-700k/year)

- estimated cost of maintenance = \$2million over 10 years (\$200k/year);
- combined construction and maintenance cost = \$7-9million over 10 years, (average annual cost of \$0.7- 0.9million/year).

Tourism visitation is expected to increase annually as sections on the KTRT are completed. Based on experience with comparable rail trails, within 10 years after opening 40,000 - 80,000 trail users/year can be expected. The resulting estimated annual visitor spend is \$1.5m/year (under a medium expenditure scenario).

By increasing tourist visitation, the KTRT could make a significant contribution to the tourism profile and economy of the South Burnett and Gympie regions by providing accommodation, food and transport services, jobs, investment and growth in the regions’ towns and communities. Trail-based tourism along the KTRT has the potential to increase demand for accommodation and other services with a **potential total (trail user) expenditure of \$10m dollars over 10 years, expanding to \$30m over 15 years.**

An objective of this business case is to consider the range of factors affecting the success of the project and provide recommendations that would produce the greatest positive benefits for the broadest cross-section of the community. The business case considers not only the project costs but also the relationship between costs and benefits.

Given the extensive range of information available on rail trails in Australia (in Victoria, Tasmania, Western Australia and South Australia) and overseas, this study has made use of published material to assist in determining whether the development of a recreation pathway along the KTRC is feasible.

12.2 Recommendations

Following consideration of the major issues pertaining to the development of a trail within the railway corridor between Kingaroy and Theebine, the Study findings support the proposal that the railway corridor be the subject of a rail trail conversion for recreation and commuter purposes, subject to a number of conditions being met.

The conditions upon which the rail trail conversion should proceed are:

1. The Queensland State Government Department of State Development, Infrastructure and Planning (DSDIP), and Department of Transport and Main Roads (TMR) accepts the key finding of the KTRT Feasibility Study (Business Case) in favour of the feasibility of conversion of the rail corridor to a multi use recreation “rail trail”, and similarly, South Burnett Regional Council (SBRC) also supports the findings in favour of feasibility.
2. DSDIP and DTMR resolve executive planning and policy responsibility issues arising from the direction by government that DSDIP exit from all recreation trails initiatives, including the KTRT proposal, determine the future arrangements for control of state assets within the corridor (rail infrastructure) currently under the control of DSDIP, and resolve issues relating to transfer/ retention or disposal of rail assets (land and structures) from DSDIP to TMR or other suitable State Government agency or Local Government.
3. DTMR, in partnership with SBRC and possibly GRC, determine, as part of a way forward, a suitable model for Project Management of the next stage, including membership off

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such a group, and any necessary administrative arrangements such as a Memorandum of Understanding (MOU) or equivalent.

4. Subject to the reformation of the PMG, the KTRT proposal moves to the next phase involving preparation of a more detailed development plan.
5. The PMG develop options for the rail trail (including trail links), key Action Areas and responsibilities (operational and non- operational matters), priorities and timeframes and determination of overall funding matters, and resolve funding matters and its scope such as the balance of available funds for sections of the corridor under the control of SBRC and the GRC area;
6. Once this is completed, the next steps should be taken (see steps below);
7. Scope and prepare an action plan to guide the ongoing planning, design and construction, management and maintenance of the former railway corridor, the proposed rail trail and trail links, consistent with suitable guidelines for rail trail development in Australia.
8. Include a consultation plan with relevant community groups, representation from adjoining landholders, and local business proprietors.
9. Prepare detailed design development plans for the rail trail, which will involve a thorough examination of the entire corridor, the preparation of detailed works lists and cost estimates, as well as a comprehensive program of consultation and discussions on-site with interested adjoining landowners affected by the proposal to ascertain their individual concerns and to find mutually agreed solutions to each issue raised.
10. In parallel with the above, ensure overall coordination by undertaking complementary planning and policy matters such as incorporation of provisions in the new SBRC planning scheme, (subject to negotiations with GRC, propose similar amendments to the current GRC planning scheme), and other statutory planning matters, and develop interim guidelines for development adjacent to the KTRT whilst the new planning scheme and other measures are being prepared, ensure integration of KTRT in broader open space or community land planning, or transport planning that is either underway or the subject of future proposals including; local park master plans and nature reserve management plans, transport planning, cycling and walking network plans, landscape amenity plans (streetscapes and townscape), waterway management or other Natural Resource Management oriented projects.

12.3 Factors Supporting the Recommendations

In formulating a decision about the future use of the former railway corridor due consideration has been given to not only the concerns and issues raised by neighbouring landowners, but also the *potential* of this rail corridor.

The following factors support the positive business case:

- The *Queensland Cycle Strategy 2011-2021* identifies the Kingaroy to Theebine Rail Trail as a possible rail trail and **one of the top 5 rail trail opportunities state wide.**
- The corridor is situated in a scenic landscape, providing views of scenic rural landscapes and attractive rural settlements. It passes through hills and valleys, forested areas, a variety of farmland and the attractions of the former railway;
- The railway corridor offers a pleasant trail experience; coupled with the ideal distance between towns, the trail could become a significant recreation resource close to high population growth areas of SEQ and WBB, and Kingaroy, the administrative centre of the local area;
- The corridor is readily accessible via the existing road and rail system and is within a half day's drive of many of the major population centres in South East Queensland;
- The trail has the potential to provide significant economic benefit to the region in which it is located – the total injection of dollars into the local economies from local, day-trip and overnight visitors may be of the order of \$1 million per year after 10 years. Urban development along the corridor including Kingaroy will lead to increasing use of outdoor recreation resources such as a rail trail and a corresponding increase in economic benefits to the communities along the corridor;

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- Cycle commuting (particularly if the recommendation that parts of the trail near towns be developed as a sealed trail is accepted) has the potential to be a significant component of the corridor within Kingaroy and larger towns;
- Several thousand school students have easy access to the rail corridor, either because their school is located alongside or has easy safe access on local streets to the rail corridor. At least some of these are likely to use the corridor for commuting to school;
- There is the benefit of providing a safe off-road facility within easy access of schools for use by the schools for activities.
- The railway corridor passes through a number of settlements, and together with possible trailheads at these towns, a variety of rides/walks of different lengths are possible;
- The trail provides a relatively unique recreation opportunity in a rapidly growing part of the Wide Bay Burnett but close to South East Qld, one of the most rapidly growing parts of Australia. These opportunities are likely to become increasingly important as the SEQ region's population grows over the next 25 years;
- The continuity of the former railway corridor is good – the entire corridor is intact and in public ownership;
- The trail has a simple route through and out of the towns and villages along its route;
- The major elements of the railway infrastructure remain (the formation, cuttings, embankments and most of the bridges and culverts);
- The surrounding farmland 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 potential for interpretation along the rail trail – adding to and enriching the experience of trail users;
- The corridor provides for a variety of lengths of walks and rides and there is great flexibility of use options, including links to other trails such as the Brisbane Valley Rail Trail and the Bicentennial National Trail.

13. Funding and Resource Opportunities

A range of funding sources and other resources have been used in the recent past. Some may be replaced by new programs in the future. They are summarized below.

This list should NOT be taken to be full and final as funding programs change emphasis from year to year and this is especially the case when there is a change in Government at either Federal or State level.

13.1 Public Funding

Details of all Australian and Queensland State Government funding programs and grants are available on relevant government websites, however they are subject to regular review. Details of a number of programs providing funding or other support for trail initiatives are provided below.

Commonwealth Government

1. Regional Development Australia (RDA) Fund- Department of Regional Australia, Local Government, Arts and Sport.

The RDA fund is particularly targeting investments across Australia's regions in areas dealing with health, education, skills, communications, infrastructure, water and climate change. Funding from this program is designed to "significantly improve economic and social outcomes" and "could include economic, social or community infrastructure which will expand the development and growth of regional economies".

Under the Biodiversity Fund (Round 1- 2011-2012) South Burnett Regional Council was successful in applying for \$1,640, 000 funding for a project titled "Facilitating a biodiversity legacy for the South Burnett region". The goal of this project is to facilitate the implementation of a region wide biodiversity and Climate Change (CC) strategy. The project aims to revegetate 200 hectares of urban and village landscapes, develop a regional fire

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management regime and reduce the spread of environmental weeds through wildlife corridors.

SBRC has advised that it has earmarked some of this funding towards the management of sites close to the KTRT. Should GRC decide to join the KTRT project then opportunities for closer partnership and application for further funding should be taken up by them.

2. "Your Community Heritage"- Department of Sustainability, Environment, Water, Population and Communities.

"Your Community Heritage" is a new approach to supporting and protecting Australia's heritage that will enable local communities around Australia to celebrate their local heritage.

The program recognises that our heritage is not just about 'big' heritage such as places on the World and National Heritage Lists, it is also about the heritage of individual communities, be they in regional Australia or small towns or in dispersed multicultural communities. Your Community Heritage is about broadening our understanding and support of heritage and the organisations, individuals, volunteers and communities, who protect and manage so many of our unique heritage places and stories.

Your Community Heritage will promote the importance of heritage to the community and its role in bringing people together, creating community identity and a sense of pride.

This program has potential to directly support and indirectly support the KTRT proposal because of the number of places of local, state and national heritage significance close to the rail corridor well as the rail corridor itself.

3. TQUAL Grants- Department of Resources, Energy and Tourism

TQUAL Grants, formerly known as the Australian Tourism Development Program, is a highly competitive merit based grants program administered by the Australian Government, which aims to stimulate sustainable growth in the Australian tourism industry.

Further information on the TQUAL Grants Program is available from:

<http://www.ret.gov.au/tourism/Pages/tourism-programs.aspx>

The Australian Government [Grants LINK](#) website provides information on what grants and other assistance is available for starting and expanding your business, research and development, innovation and exporting.

State Government

Transport and Main Roads

The *Queensland Cycle Strategy 2011-2021* sets the direction for cycling to achieve this vision and get more people on bikes for school, work, leisure and shopping trips.

The strategy targets four priority areas for cycling:

- building safe, direct and connected cycle networks
- growing a cycling culture
- creating cycle-friendly communities
- developing a cycle economy.

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The main objective for cycle policy is to develop facilities that will encourage more sustainable transport modes, such as cycling, walking and the use of public transport. Cycle Network Program funds provide cycling infrastructure for transport and utility trips that connect to major attractors such as schools, tertiary institutions, shopping complexes and workplaces.

Funding is provided to various state government agencies for the development of cycling facilities on state owned assets through the Capital Works program. Funding is also available through the annual capital grants program.

DTMR's Safe Walking and Pedalling Program (SWAPP) is aimed at school students who walk or cycle to and from school. It involves the review of the footpaths, bicycle paths and infrastructure children use within 3.2 km of a school. Rather than simply making children adopt a particular safe route to and from school, the program also aims to increase the number of walking and cycling trips taken by children. As some schools are within 3 km of the rail corridor, funding under this program may also benefit the rail corridor.

The State Government Department of DTMR is also working towards rationalising the costs of maintenance of closed rail corridors such as the Kingaroy to Theebine line. Options for redirecting essential asset maintenance funds into projects that deliver cost-effective, innovative and lasting community benefit such as recreational trails are a high priority for investigation.

DTMR has already offered SBRC funding of \$1million that could be used for the long term maintenance of the rail corridor. At the time of writing this report (June 2012), all other Queensland Government (QG) programs were under review. It is recommended that announcements regarding QG future funding opportunities are closely monitored.

Other State Government Departments

There may be further opportunities for funding partnerships to be explored between DTMR, other QG agencies and local government agencies. One possibility may be collaborative funding from multiple departments under the Government's policy direction of supporting tourism and rural development. The candidates for possible collaboration include the following departments: (1) Environment and Heritage Protection, (2) National Parks, Recreation, Sport, and Racing and (3) Tourism, Major Events, Small Business and the Commonwealth Games.

13.2 Other Funding

The Heart Foundation Kellogg 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 \$10,000 prize for the overall winner and a \$1,000 prize for each State winner. The award also offers positive promotional opportunities. The award is for Local Governments rather than community-based organisations.

Corporate funding

Any company with an operation within the SBRC or GRC region is a potential sponsor. For example, 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). In the case of the Munda Biddi Trail, Alcoa funded major parts of track construction and interpretation.

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.

Philanthropy

Philanthropy Australia is the national peak body for philanthropy and is a not-for-profit membership organisation. Their members are trusts and foundations, families and individuals

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who want to make a difference through their own philanthropy and to encourage others to become philanthropists.

Their mission is to lead an innovative, growing, influential and high performing philanthropic sector in Australia. There are a number of philanthropic organisations in Australia.

One organisation that may be worth pursuing is the Ian Potter Foundation which has a number of interests, including environment and conservation. The information on the Foundation indicates that, under its Environment and Conservation program, it supports small projects that combine elements of biodiversity and ecology preservation, volunteerism and community education. A rail trail development could fall within this mandate. (details can be found at www.ianpotter.org.au and follow the links).

Various other labour and resource programs that may partner with philanthropy are also available including Green Corps, Work for the Dole, Conservation Volunteers Australia and Prison Crews.

13.3 Who Should Drive the Project

Any rail trail development program 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.

SBRC, DSDIP and DTMR to a lesser extent have been the primary initiators of the initial pre feasibility phase of work, providing funding, facilitated private discussion, advice and recommendations for government Ministers. The Department of State Development and Planning (DSDIP) provided funding for this Feasibility Study, another important contribution.

A new Project Management Group will need to be formed to take the lead role in the next phase of the project, working in conjunction with relevant State Government agencies. The PMG should consist of representatives of both SBRC, GRC and CASC local governments and relevant State agencies (notably Department of Transport and Main Roads), and relevant community groups, and community representation. The PMG will need to take the lead role in the next phase of the project.

Management Models

This varies from state to state and even between rail trails in the same state. There is no clear direction for the management of rail trails in Queensland. One option is for DTMR to take a lead in facilitating participation by other stakeholders including SBRC, and possibly GRC in the future. Local government, initially SBRC, will have the responsibility of delivering some of the outcomes. However DTMR is also responsible for the Queensland Cycle Strategy so coordination between these two parties is key.

Coordinated management of recreation areas including a rail corridor converted to a recreation trail could be facilitated by designating the trail to be a recreation area under the *Recreation Areas Management Act 2006*. Such areas often contain land in different tenure categories including National Parks. Such areas are managed with input from the Queensland Parks and Wildlife Service. New management arrangements for rail trails are a priority for efficient and cost effective development and management.

Determining the future management model and way forward for the KTRT is likely to be a key challenge given the direction by the new State Government in May- June 2012 for DSDIP to exit the recreation trails program. No replacement agency has been identified to take up this role. The exit by DSDIP from recreation trail programs includes no further involvement in the KTRT, post completion of the KTRT Feasibility Study

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Appendix H

KTRT Feasibility Study (Business case) Project Scope (Terms of Reference)

Introduction

Following the closure and decommissioning of the railway line between Kingaroy town and Theebine rail station (near Gympie), its conversion to a recreational rail trail for walking, cycling and horse riding has been under consideration.

The study has been commissioned by the Department of Local Government and Planning (DLGP), in partnership with the South Burnett Regional Council (SBRC), Gympie Regional Council (GRC), Cherbourg Aboriginal Shire Council (CASC) and Toowoomba Regional Council (TRC) and the Department of Transport and Main Roads (DTMR). It is proposed that representatives of these organisations will comprise a Kingaroy to Theebine Rail Trail (KTRT) Feasibility Study Project Management Group (PMG). The DTMR representative will be the Chairperson of the PMG.

The feasibility study will provide sufficient information to enable the PMG to make an informed recommendation to proceed, or not to proceed, with the development of all, or part of the proposed Kingaroy to Theebine Rail Trail, hereafter referred to as the "K2T" trail or "KTRT".

Background

The rail corridor is located within the region, defined for the Wide Bay Burnett Regional Plan (WBBRP). The 132 kilometre rail corridor spans both the SBRC area and the GRC area. About 50 kilometres of the corridor is (in an area) under the control of the SBRC and the balance is (in an area) under the control of the GRC. A short section of the rail corridor is located on the western boundary of the Cherbourg Aboriginal Shire Council lands.

The Kingaroy to Theebine railway line was officially closed early in 2010. Queensland Rail (QR) owns the railway infrastructure (e.g. rails, sleepers, bridges, and signs) in this rail corridor. QR has tendered for the removal of specified rail infrastructure (e.g. rails, sleepers and spikes) within the corridor, commencing near Theebine and working towards Kingaroy. Track removal commenced early 2012 and is due for completion at the end of 2013. As part of this process, DLGP and SBRC have been working closely with QR and DTMR to identify and secure infrastructure which could remain in place to be used for a rail trail. DLGP has secured rail infrastructure (e.g. bridges) which can be used for a rail trail through a 'sale agreement' with Queensland Rail.

DTMR refers to the land in which decommissioned railway lines are located as 'non-rail corridors'. The land in these corridors is State (public) land which is leased to DTMR. This 'head' lease allows DTMR to issue sub-leases to suitable entities for various purposes including the development and operation of recreational rail trails.

The rail corridor runs through and connects diverse rural landscapes, townships, facilities and services which provide attraction and interest to locals and visitors. The township of Kingaroy is the largest activity centre in the SBRC area and the rail corridor passes through many smaller townships in both the SBRC and GRC areas.

The South Burnett and Gympie local government areas are both experiencing growth, for choice for lifestyle, employment and investment opportunities. The KTRT represents an important tourism and recreational opportunity for the region as major population centres and growth areas in South East Queensland are within three hours of travel time.

Objectives

The Queensland Greenspace Strategy 2011-2020 (QGS) identified regional recreation trail networks as an important form of community greenspace. Development of the KTRT (K2T) trail would be a significant addition to the community greenspace network within the Wide Bay Burnett region and contribute to the government's provision of outdoor recreational services.

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The QGS and regional greenspace network plans should also be considered in the development of the feasibility study.

The WBBRP Desired Regional Outcome 2, Environment, makes explicit reference to the K2T trail in Program 2.5.6; "Investigate development of a recreational rail trail along the decommissioned KTrc."

The K2T Feasibility Study seeks to establish whether, or not, developing a multi-use recreation trail along the disused publicly owned railway corridor between Kingaroy and Theebine is a worthwhile proposition, and if so, the suggested partnership arrangements, indicative costings, and time span for staged or sequenced implementation of key actions. Based on the findings and recommendations of this feasibility study, decisions on whether to pursue the preparation of a more detailed recreation trail development and management plan can be made. This future plan will guide future administration, planning, construction and management, and seek funding to enable implementation.

A key objective of this feasibility study will be to balance all factors and arrive at recommendations that will produce the greatest positive benefits for the broadest cross-section of the community.

Scope of study

This feasibility study will review examples of existing examples of characteristics of successful trails, K2T's location, landscape context and complementary local attractions, proximity to major populations and potential markets, likely use by both the local community and visitors to the region, and existing, known and possible level of support by key stakeholders.

Whilst the primary focus is on recreation corridor design and function between Kingaroy and Theebine, the options and implications of a possible linkage to the Brisbane Valley Rail Trail (BVRT) and the Bicentennial National Trail are important and will also be considered. In addition, potential spur trails to Cherbourg (non-rail trail) and Byee (towards Proston) (part rail trail) will be considered, as well as links to other local attractions.

Subject to a decision to proceed with trail development, the scope of the study will foreshadow a number of other measures to assist future implementation including the following:

- Possible partnerships, e.g. public and private partnerships between various levels of government and corporations, individuals and trusts and not-for-profit organisations
- Funding considerations as they relate to the type of partnership model

The scope of the feasibility study does not include a detailed assessment of the corridor to ascertain the condition of each and every station, bridge, or other rail infrastructure item nor detailed description of issues which may be raised by adjoining landholders. These tasks are the domain of a future trail plan and associated consultation subject to a decision to proceed with trail development.

Outputs

The key output is a report, which will include the following:

- An overview of examples of existing successful rail trails or other recreation trails and outline the basic concepts and features of such developments
- A description of how the proposed rail trail might integrate into the existing and proposed community greenspace networks within the WBB region and areas adjacent to the region
- Identification of the likely rail trail user groups (i.e. walkers, cyclists, horse riders) and their needs
- Provision of a description of the rail corridor in its current condition, and the works required for conversion to a rail trail.

Disclaimer:

The Involvement of the Department of Transport and Main Roads, the Department of State Development, Infrastructure and Planning and South Burnett Regional Council in the preparation of this Feasibility Study does not commit any of these organisations, or any other organisation, to the development of the proposed Kingaroy to Theebine Rail Trail or to any other action.

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- An evaluation of the expected benefits and estimated costs associated with the proposed rail trail development based on whole of life costs
 - An evaluation of the level of support for the proposal by key stakeholders, including the business and tourism sector
 - Identification and discussion of the main issues concerning future stages of planning and management, including overall coordination, and
 - Recommendations concerning the implementation process.
 - Identification of other possibilities for the rail corridor (or parts thereof) if a recreational trail is not found to be feasible

Funding Considerations

Should the investigations find in favour of the rail trail's development, the feasibility study will identify possible funding sources for trail development – other than the SBRC, GRC, CASC and TRC. This will include various Commonwealth and State Government funding programs available for this type of project.