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Readers should note that this report may include implicit projections about the future which by their nature are uncertain and cannot be relied upon, as they are dependent on potential events which have not yet occurred. For these reasons and others, facility development is inherently risky and frequently things do not turn out as planned.

In preparing this report, the consultant has relied upon information supplied by third parties: South Gippsland Shire Council, Vic Roads, Bicycle Network, community groups, and individuals, along with publicly available information. The consultant has not attempted to verify the accuracy or completeness of the information provided.

The consultant does not undertake any responsibility arising in any way whatsoever to any person or organisation, except South Gippsland Shire Council in respect of information set out in this report, including any errors or omissions therein-through negligence or otherwise however caused.



Thanks to the South Gippsland Shire community, the Staff at the South Gippsland Shire Council, as well as community groups and individuals for their contribution to the development of this review.

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1. executive summary



The vision of a rail trail that bisects the South Gippsland Shire creating a central active transport spine is within reach after twenty years of the initial section of the Great Southern Rail Trail being constructed.

The central rail trail 'spine' provides the opportunity from which other connecting paths and trails can eventually radiate, linking South Gippsland's towns and communities.

The 2017 project list continues to reflect this strategy, the focus still being on establishing the 'spine'. The list proposes a variety of 'spurs' in the form of shared paths, on-road cycle lanes, walking trails and combinations of all these. The aim is to provide viable, safe, interesting connections and networks between towns, points of interest and other destinations. These proposed networks and links will as a result, offer the community health, social, environmental and economic benefits far into the future.

A common matter raised with several new projects is the retrofitting of a desired standard of infrastructure into limited space combined with unresolved land tenure

paths & trails strategy 2017



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issues. For these to succeed, the process requires good planning, negotiating and a lot of good will.

Of the ninety six (96) projects listed in the 2010 strategy:

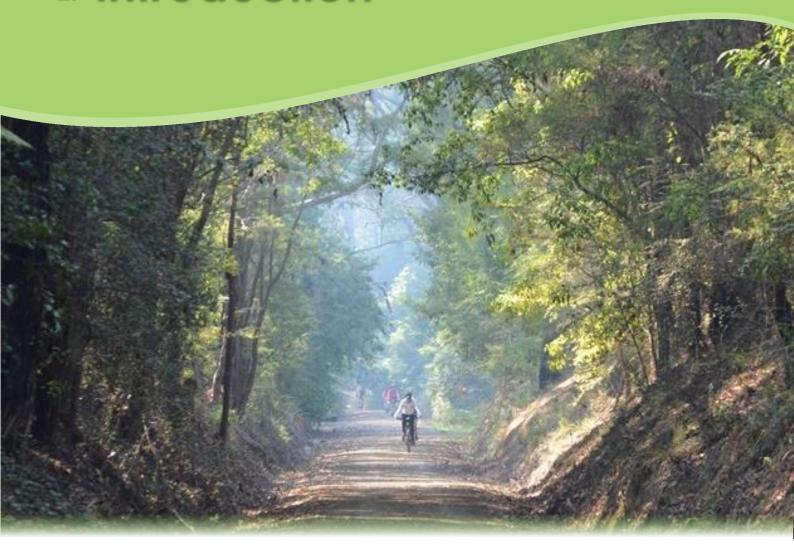
- Seventeen were completed; 18%
- Ten are in the 'pipeline, i.e. either nearly completed, designed, budgeted or a part of another project for example the Foster, Loch, Korumburra streetscapes; 10%
- Two were partially completed and there are no further plans to extend; 2%
- One will not be completed (Toora to tin mine) 1%
- Leaving sixty-six projects unresolved 69% from 2010 as:
 - many are cycle lanes that create circuits in towns. These don't receive
 high ratings usually because they are a single user type and although
 safer, they are still not ideal.
 - the major inter-town cycle routes are primarily on VicRoads managed roads which doesn't have the funding to provide the works necessary,
 - some just didn't meet the assessment criteria well enough (and therefore have a low priority).
 - some of which could be regarded as 'nice to do' and might be constructed in an ideal world with unlimited funding.

The Footpath Extension Program has been successful outside of the of 2010 Strategy and has been separated from the 2017 prioritised list and will continue to operate with a separate budget.

Communities consistently consider paths and trails as high priority projects when asked by Council during the community planning processes. This feedback helps confirm survey data that walking, cycling and horse riding constitute the largest recreational activity group undertaken by community members. This assumption is corroborated by all recreation research carried out in the past twenty years¹.

¹ Exercise, Recreation and Sport Survey (ERASS) was a joint initiative of the Australian Sports Commission and State and Territory Departments of Sport and Recreation, conducted on an annual basis between 2001 and 2010. ABS Participation in Sport and Physical Recreation data for 2013-14

2. introduction



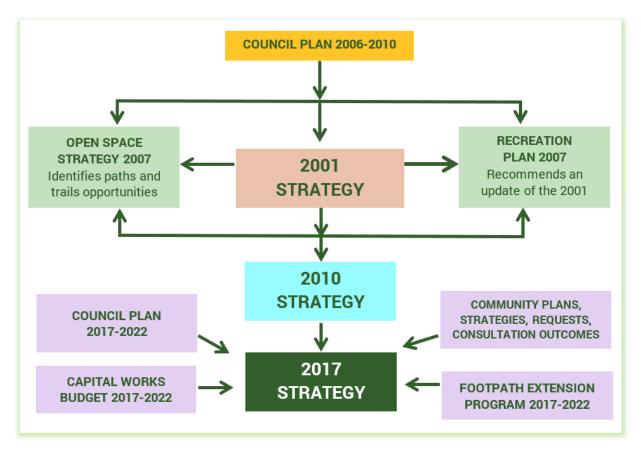
The 2010 Paths & Trails Strategy (2010 Strategy) is a result of recommendations in the South Gippsland Shire Council (SGSC) Recreation Plan 2007 and its sister document, the SGSC Open Space Strategy 2007, to update and review the 2001 Bicycle/Walking/Riding Paths & Trails Strategy (2001 Strategy).

With the successful completion of several sections of the Great Southern Rail Trail, the unfortunate demise of the tourist rail, and suggestion of several other shared paths by the South Gippsland community, Council identified the need to review the 2010 Strategy and incorporated it in its Council Plan 2017-2021.



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The flowchart below illustrates the basis of the current Paths and Trails review.



Flowchart of 2010 Paths & Trails Strategy Review

SGSC's 2017 review of the 2010 Strategy looks at how effective the strategy was in application over the past seven years. The project priority matrix (PPM) aims to provide an improved decision-making process whereby future paths and trails can be assessed against each other using value parameters and weightings. These investment decisions will often be made in conjunction with grant funding opportunities.

The 2017 review is a result of a desktop consideration of the many community studies and plans derived from Council's community consultation which seeks to determine and identify the community's needs and aspirations. A search of the SGSC internal documentation relating to paths and trails included requests, letters and submissions. Paths and trails feature heavily in many of these community documents. Residents of the Shire have a strong interest in participating in walking (running), cycling (including club competition) and horse riding as recreational activities and in fact underpins the sometimes-overlooked fact that walking

together with cycling constitutes by far the largest recreational activity/activities in Australia².

This review reconfirms previous projects and provides a brief synopsis of some new projects.

The 2017 project types include:

- Off-road shared paths;
- Off road walking paths;
- Sealing road shoulders and line marking for safer cycling.

The linking of gaps in the footpath network to ensure connectivity to destinations in urban areas is managed through the footpath extension program which is now separated from this strategy.

The associated 2017 priority project matrix (PPM) defined on page 9 seeks to provide a method of determining the priority of projects using a weighting system based on a range of both qualitative and quantitative values (these are open to discussion as there is little empirical data and therefore the allocated values are subjective). It is anticipated that PPM will be used as an ongoing assessment tool that is modifiable, updatable and is responsive to changing community needs, available funding and accessible to both the Council and the community as a reference document. A summary of the projects and priorities is attached as *Appendix 1*.

To improve the relevance of the PPM in the decision-making process, consideration could be given to the use of recognised data collection and analysis methods to collect asset user and economic data to help support or clarify project priority assumptions. This data will in turn assist in Council's decision-making process. Some data collection methods include counting (infra-red) equipment, cameras, student driven surveys of users, video survey methods, economic modelling and surveys of business can all help focus future paths and trails planning and assist in assessing the outcomes of the past decisions associated with the Paths & Trails Strategy. Some of these methods are currently being considered by staff.

² Participation in Sport and Active Recreation, Australia 2011-12 Report





The Shire has a slow growing population. (*Note: Based on available data (ABS & id – The Population Experts website) at an annual growth rate of 1.4% (Shire average)) ³ with a high proportion of older persons. The ageing population can be attributed to the Shire being seen as a highly desirable retirement destination and younger people moving away for work, education and other opportunities.

This review, as did the 2010 document, considers equestrian trails. A separate network for this user group has not been developed. Horse riders are generally restricted to dedicated private trails, bush trails in State parks, quiet country roads and rail trails. Examples are the Great Southern Rail Trail (GSRT), several proposed paths described in the Nyora paths feasibility study and the Welshpool - Port Welshpool shared path. Future options may include the proposed Leongatha to Nyora section of the GSRT, Nyora - Cranbourne and the Nyora to Anderson rail trails.

³ SGSC Blueprint For Social Community Infrastructure 2014- 2029

3. vision



3.1 2017 Guiding Principles

To achieve this vision seven principles are listed which provide a guiding framework for the development and implementation of a successful walking, horse riding and cycling network as follows:

(1) THE SOUTH GIPPSLAND EXPERIENCE

Capitalise on South Gippsland's spectacular surrounds, providing a range of memorable and unique journeys through its diverse landscapes. Regional trails will traverse and connect to the coast, plains and wetlands in the south, farmland and rolling hills around the GSRT, natural bushland and hills in the north.



② HEALTH & WELLBEING

Enhance the health and wellbeing of the community by providing the safe environment and infrastructure that supports participation in local recreational experiences. Being active supports good physical and mental health. The walking and cycling network will create walkable neighbourhoods, enjoyable recreational experiences, as well as an increased sense of social connectedness within the local community.

3 ALL ABILITIES ACCESS

The walking and cycling network will be inclusive of people with mobility difficulties including people in wheelchairs, prams and mobility scooters. Infrastructure such as DDA compliant paths and ramps, and rest areas will be prioritised on appropriate trails.

4 SAFETY & PERCEPTION

Create a safe and comfortable walking and cycling environment for all users. Priority will be provided to pedestrians and cyclists, over motor vehicles along key routes and within town centres. People will feel safer using the streets and trails that have increased passive surveillance and improved lighting.

(5) CONNECTING PEOPLE & PLACES

An integrated and more accessible network will provide convenient access for locals and visitors to town centres and key destinations. Strategic links and pedestrian priority routes will support walking and cycling as the preferred transport option when moving through town centres, to and from schools and making local trips. Importantly, the network will strengthen the existing stop and drop zones in South Gippsland. Additionally, the regional trail network will connect townships across the Shire and beyond.

6 AWARENESS & EDUCATION

Create an environment in South Gippsland Shire where walking and cycling are logical and enjoyable travel options. Break down the social and psychological barriers that prevent walking and cycling by raising awareness of the many benefits of being active. Support community events, education programs, as well as a comprehensive signage and wayfinding strategy to promote local opportunities.

(7) ECONOMY AND TOURISM

High quality infrastructure contributes to a healthy, strong local economy, adds to the visitor experience, enhancing the prosperity of the community. Council will work with stakeholders to increase economic growth and employment prospects. It will develop policies and pursue projects to improve the capacity of local residents and business to be part of this growth.

4. 2010 strategy review



4.1 Community Response to the 2010 Strategy

The 2010 Strategy provided a detailed approach to assessing community projects. The community understood that rankings didn't preclude any project if circumstances arose that allowed individual projects to proceed, such as specific funding opportunities. As an example, the Community recognised the potential of the GSRT to the Shire with its potential flow-on effects.

Nevertheless, the Shire also got on with implementing some local projects of lower priority. Many projects put forward through the 2010 consultation process would have been great to get up but are beyond the current resources available in the suggested time frames. An example are the difficulties identified in the shared path linking the GSRT in Foster to Wilsons Promontory. Perhaps once the full GRST has been constructed and more Council funding and resources become available, efforts can be directed to developing some of these major spur links.

Review of 2010 Paths & Trails Strategy



4.2 2017 Review Objectives

This 2017 review is to:

- Review the 2010 Paths & Trails Strategy and examine how effective it was,
 i.e. what were the outcomes and how it can be improved.
- Determine what the community and user expectations are and what can realistically be achieved where stated.
- Establish a hierarchy of the most appropriate routes, trails, paths, linkages and circuits and developing a list of priority projects by 3 Project Classes; Construction Projects, On-road Linemarking & Signage Projects, and Projects on VicRoads Roads (*Appendix 1*).
- Update and establish the cost of constructing bicycle, walking, riding paths & trails and to review and examine alternative methods and materials using the rates in *Appendix 2*.
- Determine ongoing management responsibilities, particularly maintenance being the highest cost, together with risk and liability. Provide a strategic approach to the provision of a comprehensive cycling and walking network.
- Present review outcomes for Council including a draft five plus year action plan.
- Provide some recommendations for improved processes relating to SGSCs paths and trails.

4.3 Significant Changes – Then to Now

Much of the information contained in the 2010 Strategy is still current and holds true for today. There has been some updating of design specifications and design philosophy by Austroads / ARRB (and other bodies). These changes include specifications on shared path width, methods to achieve separation of users, on road cycle lane design, curve radii limits, and construction materials (rolling surfaces). The relevant information on design standards can be found at: https://www.onlinepublications.austroads.com.au.

Incident data and user surveys, primarily from urban (city) shared pathways, indicates that separation of users (walkers, cyclists, horse riders and cars) is of

critical importance. The conflict occurs due to the differing speeds, vehicle size, use patterns and space available i.e:

- Cyclists can travel much faster than walkers.
- Walkers (recreational) tend to wander especially those with dogs.
- Horses due to their size can intimidate and block other users.
- Pedestrians, cyclists and horse riders, although legally able to use any road, do not mix well particularly in numbers for the above reasons.

The changes to design/construction standards reflect these issues by recommending:

- The widening of paths (2.5 metres or more, 4m would be nice!) and/or recommending complete separation of users by constructing separate paths.
- By providing a physical barrier (e.g. 'w' section traffic barriers.) for which the style would depend on the road's speed limit.
- Improving surface materials, with the aim of improving rolling speed, stability and life span/maintenance costs.
- Differentiating the surface colour (buff coloured stone in a spray seal etc.)
 providing a visual cue for drivers.
- Guide posts as a visual barrier, cue for motorists.
- Separate user paths.

These items can significantly increase the construction costs for any proposal and usually result in a multitude of design and construction options that need to be considered early on in the community consultation and development process.

For example, placing users on a formal or recognised 'shared path' on a road shoulder that adjoins a 100kph road with no vehicle- pedestrian separation is a high-risk strategy that doesn't meet Councils' 'duty of care'. Cyclists and pedestrians can and do currently use road shoulders on rural roads as the only realistic option. The difference is the formality of the route.

Engineering solutions used to resolve such safety issues include:

Reducing the speed limit;



South Gippsland Shire Council

- Pushing the path further into the road reserve to achieve greater separation from vehicles.
- Highlighting the path by colouring the surface.
- Constructing barriers.

4.3.1 Design concerns

Shared cycle and parking lanes are now viewed as virtually unworkable as a single parked car pushes the cyclists onto the traffic lane creating an unacceptable risk. Cycle lanes adjacent to parking lanes without separation have caused many incidents, drivers opening car doors in the path of cyclists the major issue. As a result, authorities are reluctant to implement this style of cycle route.

4.4 2010 Strategy Project List Review

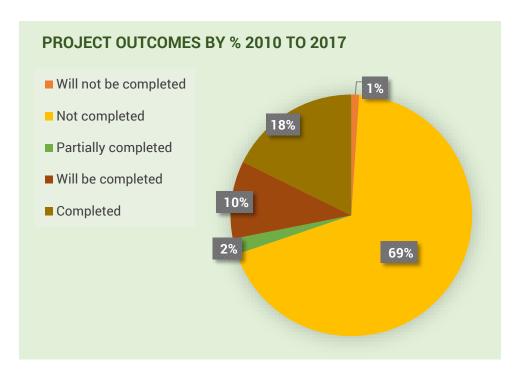
4.4.1 Summary of Outcomes

The Project Priority List from 2010 has been reviewed to determine the status of the ninety-six (96) projects listed as of 2017.

Note: The 2010 Project List included footpath proposals from the 2010 Footpath Extension Program:

- Seventeen were completed: 18%
- Ten are in the 'pipeline, i.e. either nearly completed, designed, budgeted or a part of another project for example the Foster, Loch, Korumburra streetscapes: 10%
- Two were partially completed and there are no further plans to extend; 2%
- One will not be completed (Toora to tin mine): 1%
- Leaving sixty-six projects from 2010 as unresolved: 69%
 - many are cycle lanes that create circuits in towns. These don't receive
 high ratings usually because they are a single user type and although
 safer, they are still not ideal.
 - the major inter-town cycle routes are primarily on VicRoads managed roads which doesn't have the funding to provide the works necessary.

- some just didn't meet the assessment criteria well enough (and therefore have a low priority).
- some of which could be regarded as 'nice to do' and might be constructed in an ideal world with unlimited funding.



4.4.2 Completed Projects

Several large projects were completed in the past seven years including four sections of the Great Southern Rail Trail:

- Foster to Toora.
- Toora to Welshpool.
- Upgrade of the Welshpool-Port Welshpool Trail completed with savings from the Toora-Welshpool GSRT funding.
- Koonwarra to Meeniyan-Black Spur section which included substantial bridge remediation / replacement.

These projects received substantial funding from the Victorian State Government and the South Gippsland Shire Council.

Several shorter off road shared paths were completed:

Toora to the Toora recreation reserve: by the SGSC.



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- The extension of the Tarwin Lower/Venus Bay shared path along Jupiter Boulevard to the Venus Bay shops: by the SGSC.
- The Roy Henderson trail, Manuka St. to Shallow inlet: by the Sandy Point Foreshore Committee of Management (Local CoM, DELWP).
- Strzelecki Highway north side, from Wanke Street to Balook Street: by the SGSC.
- Port Welshpool along Corner Inlet from Long Jetty Caravan Park to Public toilets: by the SGSC.

4.4.3 SGSC Footpath Extension Program

Many of the projects listed in the 2010 strategy were urban footpaths. The footpath extension program (FEP) was included in the 2010 PPM. Most of those items included from the FEP focused on connecting disparate sections of the existing urban footpath network. Due to FEPs' standalone budget and for the sake of streamlining this review document, the FEP has been removed from the 2017 Project List and is managed separately.

The capital works budget 2017 identifies continued funding for the FEP at varying levels to the current budget reflecting the community support for this program.

4.4.4 Remaining Projects

The project list in 2010 was intentionally an extensive 'wish list'. All projects that fell under the broad heading "Paths and Trails" that had been identified by Council, the community, and external authorities were included to show what was being considered by the broader community and could, as a result, be considered against each other. Many were not feasible due to topography, land ownership, area constraints, and some were / are just too costly.

The community repeatedly identifies the need for safe cycling and walking i.e. not on roads mixing with vehicles. Unfortunately, in the attempt to create logical and effective links between facilities and destinations some on road routes are unavoidable. By creating a cycle lane or directing users onto the road implies a 'duty of care' upon Council. This duty of care can be achieved through good design using recognised standards. However, in many cases, retrofitting a lane or path

onto existing infrastructure will not allow Council to meet those standards, without expensive engineering solutions and/or land purchases/lease etc.

When designing a path/trail/lane, safety is of the highest consideration.

Recognised standards are followed to ensure all safety issues are addressed and

Council does not expose itself to unnecessary liability risks.

The above scenario partly explains why some paths, cycle lanes and cycle line marking haven't been completed. For example, the shared path from the Korumburra Secondary College to Radovick Street Korumburra requires width that is not available along the road reserve and may require some land acquisition. It is still highly rated in this document and may need stronger community support to drive it. Sections of the cycle network which includes Jumbunna Road is listed on VicRoads 'Principal Bicycle Network & Strategic Cycling Corridors' Gippsland' as a priority and as such may be suitable for funding from VicRoads.

Most streets and roads in South Gippsland fall below the critical traffic volume of 3,000 vehicles per day and hence don't trigger the Austroads, AARB design and Standards Australia criteria. This combined with low request numbers by the community (2017 request review) to Council has resulted in no new cycle lane marking carried out in the intervening years.

One site that achieved a fairly high priority ranking and recommended as a trial site in the 2010 strategy was the intersection of Ogilvy St (Nerrena Road) and the South Gippsland Highway. Since then the Leongatha heavy vehicle alternate route has been completed resulting in a redesigned intersection with traffic lights and pedestrian crossing points across the South Gippsland Highway and a bike holding / stopping space at the intersection. However there are no marked designated lanes, coloured, or otherwise linking cyclists over the rail bridge (no space) to the west or linking back to the lanes marked in Ogilvy Street. This situation could easily be rectified and is listed in the 2017 Project Priorities (projects on VicRoads roads).

Most of the 2010 on-road cycle lane / network recommendations still stand and have been included in *Appendix 1* as part of this review for ongoing consideration by the Community and Council as populations and cycle use steadily increase.



4.4.5 Funding Outcomes 2010-2017

Significant funding from the Federal Government, Victorian Government and the SGSC was secured by Council for the completion of the sections, Foster to Welshpool/Port Welshpool and Black Spur. Now completed, the rail trail runs uninterrupted from Leongatha to Welshpool, a length of seventy-two kilometres.

The remaining projects were funded by the South Gippsland Shire Council from the capital works budget. The Department of Environment, Land, Water and Planning. (DELWP) and Parks Victoria contributed to the construction by the Sandy Point Foreshore Committee of Management of the Ray Henderson path.

Some community driven paths and trails projects were partially funded by the SGSC community grants program.

Many Federal Government funding programs have, over the past seven years been reduced or discontinued. Examples of discontinued programs are the:

- Provincial Pathways Program
- Small Towns Development Fund
- Regional Partnerships Program

Funding through the State Government programs were reasonably successful with money coming from the Premier's Community Support Funding.

Sometimes funding has been opportunistic. The 2010 Strategy provided strategic and planning support for funding programs when new grants became available.

4.5 2017 Funding Opportunities

There are several Federal, State and Local government grant programs. These mainly focus on improving infrastructure for safety and connectivity.

4.5.1 Federal Government

Building Better Regions Fund

The Building Better Regions Fund will invest nearly \$500 million over four years in infrastructure projects and community investments to create jobs, drive economic growth and build stronger regional communities into the future.

Community Development Grants Programme

The Australian Government has established the Community Development Grants Programme to support needed infrastructure that promotes stable, secure and viable local and regional economies.

National Stronger Regions Fund

The National Stronger Regions Fund invests in infrastructure projects which deliver economic benefit and address disadvantage.

Stronger Communities Programme

The Stronger Communities Programme is providing \$67.5 million over three funding rounds commenced in 2015/16.

Regional Growth Fund

The Australian Government will provide \$472.2 million over four years from 2017-18 to establish the Regional Growth Fund.

4.5.2 State Government

Several of the programs below are linked to the Federal funding initiatives but are administered and enhanced by the Victorian State Government.

Regional Jobs and Infrastructure Fund

The Regional Jobs and Infrastructure Fund (RJIF) is the Victorian Government's overarching regional development package. It invests in growing jobs, building infrastructure and strengthening communities in regional Victoria.

Regional Development Victoria (RDV) manages the RJIF's three programs:

Regional Infrastructure Fund (RIF)

Review of 2010 Paths & Trails Strategy



- Regional Jobs Fund (RJF)
- Stronger Regional Communities Plan (SRCP)

Rural Development Program Stream

Investing in local infrastructure, creating opportunities for economic growth and enhancing the appeal and liveability of rural towns and surrounding areas.

Productive and Liveable Cities & Centres Program Stream

Supporting significant infrastructure projects in regional cities, centres, and towns.

Enabling infrastructure Program Stream

Supporting regional industries to innovate, build resilience, and improve their adaptability to changing economic and environmental conditions.

Community Capacity Building Program Stream

Developing and strengthening local people's capacity to make a difference in their communities.

Regional Skills Fund

A targeted, place-based regional skills grants program driven by industry in partnership with the tertiary sector, working to build local capacity, resilience and support jobs creation.

Population Attraction Program Stream

Attracting groups, such as professionals and skilled labour, businesses, families and young people to regional Victoria.

Community Road Safety Grants

The TAC offers community groups in Victoria the opportunity to apply for funding for road safety projects under the Community Road Safety Grants Program. This program aims to:

- Encourage community involvement in local road safety programs that are consistent with Victoria's Road Safety Strategy.
- Provide opportunities for local community groups to develop and implement effective road safety projects targeting specific local road safety issues.

Local Government Grants for Small-Scale Infrastructure

Local Government Areas (LGAs) in Victoria have the opportunity to apply for funding for small-scale infrastructure treatments to address pedestrian and cyclist safety under the Local Government Grants Program. This Program aims to:

- Encourage local government involvement in cyclist and pedestrian safety projects that are consistent with the Towards Zero 2016-2020 Road Safety Strategy and Action Plan.
- Provide opportunities for LGAs to develop and implement low cost, effective infrastructure treatments targeting cyclist and pedestrian safety issues.

Principal Pedestrian Networks

Walking is the most participated in form of active transport. In recognition of this, the department has developed guidelines to assist local councils to develop Principal Pedestrian Networks (PPNs).

The PPN process involves mapping out and planning for a higher quality walking environment on key routes to local activity centres such as shops, schools and transport hubs.

4.6 Maps 2010-2017

In the 2010 Strategy each proposed project together with the existing walking, shared paths and cycle routes in each town was mapped by hand. It was intended that these maps would be made available to communities upon request to assist in their planning. It was also intended that the maps would be transferred in to the Council Geographic Information System (GIS).

It is not in this review's scope to update the paths and trails maps again by hand nor is it necessary as the bulk of the 2010 map information, i.e. the Shire footpath network has already been mapped on the Council's GIS. The remaining completed shared paths, rail trails, walking tracks, cycle lanes/routes still need to be mapped in the GIS and would be relatively achievable due to the small number completed.

The proposed paths and trails could also be mapped in their own 'layers' making all the proposals readily visible and available on demand.



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Council will need to allocate extra resources for the completion of this mapping project.

4.7 2010 Project Priority Matrix (PPM)

The proposals identified in 2010 were prioritised based on the adoption and modification of 'Prioritisation of Bicycle Infrastructure Proposals' commissioned by the Australian Cycling Council and prepared by Ian Ker and Adam Sidebottom, ARRB Group Ltd Project No. WC5227- December 2005.

The weighting values were subjective and based on the communities' and SGSC officers' observations, records, complaints database, accident counts and personal experience. The PPM (and underlying spread sheet) was a live document and allowed for future modification or reprioritisation if other data become available, or priorities changed.

It should be noted that prioritisation of bicycle infrastructure proposals require:

- Comparable information across a diverse range of initiatives.
- A framework for undertaking comparative assessment of that information.
- Techniques for handling information of various types and quality of information, including:
 - Monetary
 - Quantitative, non-monetary
 - Qualitative
 - Descriptive
 - Analytically-derived
 - Politically derived
 - Policy-derived
 - Professional judgement

Traditionally, transport and related initiatives have been evaluated within a benefit-cost framework that is heavily reliant upon the quantification of outcomes and their conversion into monetary values. Whilst benefit-cost analysis is still a valid and necessary component of evaluation, it is insufficient to accommodate the

broad range of government and community objectives that initiatives must increasingly address — often reflected in the shorthand of *triple-bottom-line* or *sustainability* assessment. In this broader context, not all criteria will be measurable in quantitative terms. Emerging guidance on project appraisal, including national methodology being developed under the *AusLink* National Land Transport Plan, acknowledges the need for and value of both quantitative and qualitative measures in response to the broad range of criteria identified as being relevant. Current Australian practice in the area of infrastructure project evaluation ranges from formal multi-criteria analyses to subjective internal rankings.

A key priority for walking/cycling infrastructure was the completion of the strategic networks. Feedback received from stakeholders generally supported an outcome which produced prioritisation parameters that were⁴:

- Safe and easy to use;
- Developed specifically for cycling/walking, rather than an adaptation of a road-based tool:
- Provided a clear ranked list of projects; and
- Enabled easy, robust justification of prioritised projects.

The PPM is designed as a decision-support system, rather than a prescriptive ranking toolkit, although it is used in this Strategy to produce a ranking. Recent developments in project prioritisation in transport, generally, have adopted an approach similar to, but, in the case of walking/bicycle facilities, less detailed than that proposed here.

The PPM is at the core of the proposed methodology and is structured in such a way that it reflects the prioritisation parameters identified by stakeholders. The PPM will not, in isolation, provide decision makers with a definitive list of projects with their associated scores or rankings. Instead, this approach presents the decision maker with all necessary information with which to make decisions.

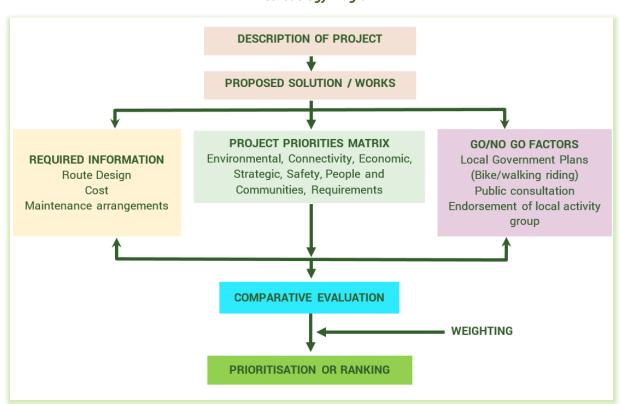
To clarify, the importance of the PPM is in the consistent, comparable information for each proposal it presents by addressing fixed criteria and objectives. These

⁴ This feedback is derived from '*Prioritisation of Bicycle Infrastructure Proposals*' commissioned by the Australian Cycling Council and is used to reflect common outcomes of 'active transport' surveys.



features can be summarised as:

- Consistent and Comprehensive information across all project proposals.
- Quantitative and Qualitative aspects for all criteria where applicable.
- Leaves the decisions in the hands of the decision makers.
- Values, Objectives and Criteria could be based on stakeholder input/feedback (this needs to be developed).
- Facilitates the consideration of projects that are difficult to assess by traditional benefit cost analysis.
- Allows informed quantitative analysis using a simple multi-criteria analysis.



PPM Methodology Diagram

This methodology is a decision-support system which has the following aims:

- To locate the responsibility of decision making with decision makers, not the proponents, analysts or toolkit developers.
- To present all relevant information, both quantitative and qualitative that will aid in the decision-making process.
- To allow easy comparison of proposals for the purposes of prioritisation.

The PPM is divided into seven (7) objectives and twenty (20) sub-objectives.

Each sub-objective requires a qualitative impact assessment as well as the provision of appropriate measurements or estimates ('metrics') related to the criterion. In all cases, a qualitative assessment is required. For the measurements or estimates related to the project, the proponent is asked to add whatever information or data they think is relevant to the proposal.

Given the disparate nature of proposals, directly comparable quantitative requirements are not possible when dealing with multiple projects. If a PPM was being used to assess a number of different options for the same problem (for example, a shared path versus a bridge at grade) then directly comparable quantitative measures should be prescribed in the assessment framework. This PPM recommends some indicative values which may be generic and relevant to a high proportion of projects but are by no means universal or comprehensive. For example, walking paths will have a universal '0' for the cycle values.

4.8 2017 PPM Revised

This review has recognised several issues surrounding the original 2010 PPM spreadsheet:

- It was large, 96 projects.
- Only identified project responsibility in a general fashion, not dept./officer level.
- Included the footpath extension program that was already operating independently with its own budget.
- Although considered complex, this helped spread the valuing process and reduce the subjectivity of the valuation process.
- Several significant omissions in the objectives e.g. environmental impacts, level of service / DDA compliance and catchment size, have been included in the revised 2017 PPM.

Projects of similar type can be readily sorted (using excel spreadsheet format) within the PPM and therefore readily compared when considered for funding.

5. community consultation



5.1 Consultation Methodology

This desktop review of the 2010 Strategy has considered priorities highlighted from a broad range of inputs including community plans, town infrastructure blueprints, town infrastructure plans, community requests, meeting feedback notes, SGSC officer works programs, outcomes from the *Our Say* internet community consultation, Budget submissions, Section 223 submissions and the Community Capital Works funding process amongst others.

5.1.1 Inputs into the 2017 Review of the 2010 Strategy



Inputs into the 2017 Review of the 2010 Strategy

Telephone discussions regarding individual proposals were held with lead community members and groups to help this review clarify their aims, gather extra data, and to confirm intentions on specific projects. Those spoken to include the Walkerville Residents and Ratepayers Association, Sandy Point Community Group, Prom Country Tourism, Friends of Agnes Falls, Mossvale Advisory Committee, and various unsuspecting shop keepers.

If the information available was sufficient to determine route, land ownership, user type and estimate costs, proponents weren't generally contacted. For example, the Hoddle Mountain Trail Management Group recently made a comprehensive



PowerPoint submission to Council. This information together with that sourced from Council's internal data systems, including letters of opposition, were used in the ranking and analysis of that project.

During the individual discussions, the subject of the GSRT was briefly raised. The general consensus of those asked believed the GSRT and its future extensions could only contribute in the long term to the well-being of the broader community, eventually providing links and context to their specific projects.

This review (2017 Strategy) was placed on public exhibition for comment after the presentation to Council on 20 September 2017.

5.1.2 Future Community Consultation Methods

The internet is already being used by Council in their community consultation process in the form of the *Our Say* feedback forum. This could be expanded to include an on-line project mapping forum. Several councils, such as Greater Dandenong City and Bass Coast Shire, have used the internet to allow their communities to directly identify paths and trail opportunities in their municipalities.

This strategy employs innovative techniques to ensure the community enjoyed multiple opportunities to contribute. 'Crowd Spot', a visual consultation tool, enabled people to have their say online by sharing comments about specific geographic locations on an interactive map. Community members had the opportunity to identify spots where they liked or disliked to ride/walk and spots where they had an idea about how the location could be improved. This engagement tool was supported by community consultation, including paper based surveys and community conversations at designated events. At Greater Dandenong, over 500 residents were engaged in the consultation phase, with 336 community members utilising the Crowd Spot Map. The results of the consultation informed the development of their Path & Trails Strategy and action plan.

Example of the 'Crowd Spot' consultation process Greater Dandenong City





Several new off-road paths have been included in the 2017 Project Priorities List. Some have been driven by respective communities appreciating the benefits of off-road paths and trails can bring to their local environment and several have been included because of their potential to provide Shire wide benefit.

Those that require significant further development are briefly described on the following page.

6.1 Great Southern Rail Trail (GSRT)

6.1.1 The GSRT: Leongatha to Nyora Extension

Due to the cessation of the Nyora to Leongatha tourist rail, an opportunity now exists to extend the GSRT from Leongatha through to Nyora via Ruby, Kardella, Korumburra, Bena and Loch at a length of 43kms.

Lang Lang
(Cardinia Shire)

Poowong

Loch

Bena

Anderson
(Bass Coast
Shire)

Leongatha

GSRT Extension Leongatha to Nyora and Beyond

If the GSRT is extended to Nyora, it will become the second longest continuous rail trail in Victoria and be of national significance in terms of accessible rail trails.

This opportunity allows the development of the trail beyond the Shire boundary, linking it to the rail head at Cranbourne (or Clyde, if the suburban rail is extended).

As to when and how the GSRT extension to Nyora proceeds is dependent on external funding. Staging its development may be critical to its future success.

Options may include:

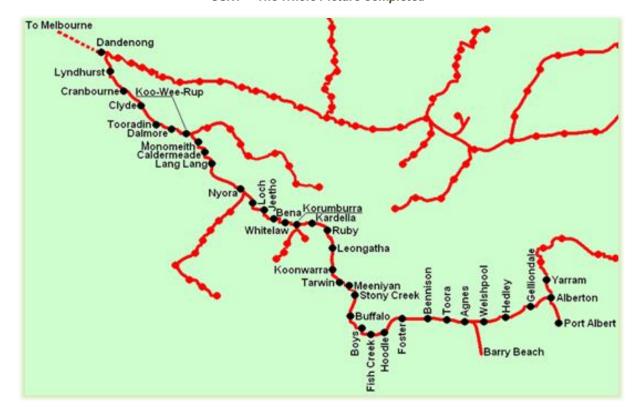
- 1. Construct the GSRT the full length, Leongatha to the Shire Boundary.
- 2. Leongatha to Korumburra 14km, this allows the linking of the Shires two major population centres together with old station sites of Ruby and Kardella.
- 3. Korumburra to Nyora including Bena and Loch.



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4. Develop the rail land and buildings in Leongatha and Korumburra, an option that allows significant community benefit in the short term for less capital outlay (for the trail). The inter town connections can be developed later.

Further to the above extensions, the rail reserve from Nyora to Anderson in the Bass Coast Shire provides further connectivity options. This option may be considered after all the GSRT options above have been completed rather than diverting users away to the Bass Coast Shire and the coast beyond via Anderson. After reviewing the Cardinia Shire's Paths Strategy, it could be supposed that they have a similar strategy. Their strategy doesn't propose extending the rail trail connections south to the South Gippsland Shire or north to the City of Casey. Instead they have focused their future trail developments a few kilometres either side of the townships Koo Wee Rup and Lang Lang. This approach may make linking Nyora with the suburban rail head difficult in the future.



GSRT - The Whole Picture Completed

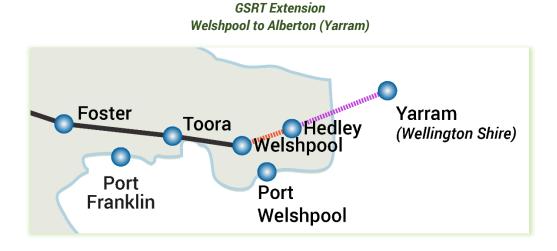
As the Nyora-Leongatha tourist train operated up until a few years ago, most of the infrastructure should be sound enough to use for the rail trail. Some preliminary structural investigations confirm this. The extension of the trail from Welshpool to

Hedley and beyond has not been used by trains for many years. Further feasibility and engineering reports would be required before costs can be apportioned.

Major rail trail road crossing designs, for example at the South Gippsland Highway in Leongatha, have not been resolved and may add substantially to the final cost of this Leongatha-Nyora section. This crossing design may be integrated with the Leongatha Station and Bair Street link development plans. Preliminary cost estimates are approximately \$1.5 million.

6.1.2 The GSRT: Welshpool to Hedley extension

There is also an opportunity to extend the GSRT east from Welshpool to Hedley and beyond to Alberton, linking with the Wellington Shire's plans to take the 'Tara Trail' from Yarram to Port Albert, thereby creating a truly iconic piece of infrastructure, Cranbourne to Port Albert or Yarram.



6.1.3 Future GSRT Management

Currently, the GSRT from Leongatha to Welshpool is on Crown Land and was managed by the GSRT Committee of Management (CoM) on behalf of DELWP. Due to increased complexity and level of GSRT management required, the volunteer committee was finding it difficult to continue. Lack of volunteers has resulted in the committee's demise with the committee handing the responsibility back to DELWP in June 2017. DELWP sought interest for a new/revised committee and a new committee is in the process of being appointed.

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To secure the proposed GSRT extensions, Council will to consider a lease or license of the rail corridor and buildings from Vic Track. Total length will be over 120km.

The current budget available to the GSRT CoM for maintenance is approximately \$1,400 per kilometre for the 72 km length from Leongatha to Welshpool which totals around \$100,800 per annum .If Council were to ultimately take over responsibility for the full length of the trail, the recurrent maintenance costs are estimated to be around \$300,000 per annum⁵.

Friends groups located in each town and allocated a section each could help reduce this figure, however coordination and support by Council will need to be considerable.

6.1.4 Consultation / Research

Consultation and research was restricted to:

- A desktop review off Council's relevant plans and strategies;
- Meeting with Shire staff;
- Informal community discussions;
- Results from the 'OUR SAY' internet and site forums; and
- Results from adjoining Shires plans and strategies.

⁵ Expansion of Great Southern Rail Trail and Lease of Station Buildings; Council Strategic Briefing Agenda - 15 March 2017

6.2 Hoddle Mountain Trail

The Hoddle Mountain Trail Management Group, a community based volunteer group, approached Council on 17th May, 2017 with a proposal seeking Council support for the ongoing development of the 17-kilometre Hoddle Mountain Trail and recognition of the Trail as a major community asset.

The proposal sought assistance from Council to upgrade its sections of the already used track to allow the management group to maintain the trail into the future to an agreed standard.

6.2.1 Consultation / Research

Consultation and research included:

- A desktop review off Council's relevant plans and strategies, letters and submissions;
- Meetings with Shire staff;
- Discussion with Prom Country Tourism representative; and
- Research into Council's mapping document and request handling systems for relevant information.

6.2.2 Hoddle Mountain Trail Route

The Hoddle Mountain Trail creates a loop intersecting with the GSRT at Fish Creek and to the north east at Mt Hoddle Road. The trail utilises Council road reserves, private land, internally skirts a quarry site, crosses South Gippsland Water land and links with the Loader Track providing spectacular views of Wilsons Promontory and Corner Inlet. Superficially, this appears to be a proposal that fulfils many of Council's and this strategy's aims. Refer to map on page 35 below.



Hoddle Mountain Trail Map



6.2.3 Mount Hoddle Trail Issues

Before any decisions regarding formal development and recognition of the trail can proceed, several issues need to be resolved regarding the current land tenure of the proposed route and the potential impacts the proposed route would have on the adjoining properties.

6.2.4 Land Tenure or Status

Council to take a leadership role by gathering all the stakeholders to flesh this proposal out as some adjoining landowners have objected to this proposal.

Fish Creek Quarry road (from Fish Creek-Foster Road to Beards Rd.) is composed of road parcels (non-crown) owned by Council. These would need to be put on Councils' road register as a trafficable 'path'. This would then require Council to formalise and develop the trail route to appropriate standards to address its' duty of care taking into account the following:

- Clearly define trail, include start finish maps
- Construct a 1.5-metre-wide gravel path
- Suitable fencing

- Priority gating to allow continued farm use
- Signage
- Walkers only designation
- Stream crossing points

The road leading from Beards Road to the Quarry is on private land. The status as a road is undetermined and needs to be resolved prior to further discussions:

Use of the Quarry

- Does the proposal conflict with operations? Yes.
- What is the future of the quarry? Council to determine.
- Does the 'trail' need to be subdivided from the quarry title to ensure future viability of the trail? Council to determine.

Use of land owned by South Gippsland Water (SGW)

 If Council is to commit resources it needs to develop a Memorandum of Understanding (MoU) or similar from SGW to ensure future trail viability.

Consideration of Beards Road as an alternative link

 This option still allows direct access to the GSRT however, while the quarry is considered operational, trucks access the quarry via Beards Rd making this route unsuitable for pedestrian access. This route would be suitable if the quarry was closed.

Road Reserves

- Confirm land status of 'Loader Trail' as a government road reserve and therefore Council's responsibility for development and maintenance;
- Clarify the status of the unmade government road reserves that have existing leases/and licences over them.

Objections

- Resolve adjoining land owners' legitimate concerns surrounding the use, development, and promotion of the trail:
 - They currently use road reserve for farming activities. Consider the use of priority gating system for farm use;

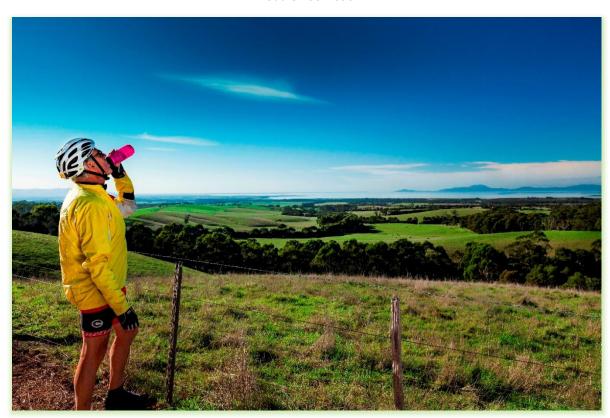


- Have had privacy issues etc. although this is simple trespass;
- Consideration should be given to suitable dog proof fencing along common boundaries.

Future Management

- Determine the Hoddle Mountain Trail management group's long-term maintenance intentions:
 - Revolve construction details.
 - Determine Trail hierarchy level and user access limitations.
- Is Council prepared to fund recurrent expenditure for maintenance of this proposal should the management group fail to meet maintenance standards in the future?





6.3 Waratah Way

The Sandy Point community, represented by the Sandy Point Community Group, has demonstrated a continued interest in the development of a shared path linking Sandy Point and Waratah Bay. Significant support has been shown by the local community and visitors through petitions, presentations etc., and the project has been listed in the Sandy Point Community Plan.

Two possible alignments for a shared path were identified by Council Officers:

- Option 1 follows the alignment of a previously cleared slashed fire break /
 weed management access, which is located at the base of the northern side
 of the sand dunes. This alignment is partly on Crown Land and partly on
 privately owned land.
- Option 2 is entirely within Crown Land, however extends into the sand dunes by up to 45 metres and will require extensive vegetation removal and earthworks.

A consultant, Ethos NRM, was engaged to undertake a preliminary study of potential impacts and risks associated with these two possible alignments for a shared path from Sandy Point to The Gap carpark at Waratah Bay.

From the Ethos report, personal observation and document review (particularly historical evidence) **Option 2** must be considered un-feasible due to the potential damage the construction and the resulting user impact could have on a single crown dune system. This fragile system is all that separates valuable farm land from Waratah Bay.

For **Option 1** to become viable, the private land tenure issues need to be resolved (one way or another).

Some options may include:

- 1. Purchase the private land. This could include a strip of cleared land, 5m north of the existing fence line providing some advantages:
 - Using cleared pasture would allow for ease of construction and reduce costs and time.



 Significantly reduce the need for further environmental studies, vegetation offsets (these will be very difficult to secure).

Note: if the point above is being considered, the path would have to still bend south into the dune system to avoid the shed complex and adversely affecting farm operations.

- This consideration still allows farm access for both foreshore and farm management purposes.
- 2. Lease or rent the land on a long-term arrangement. Secure similar land area as suggested in the above point.
 - It is generally felt that this proposal does not justify a compulsory acquisition process.
 - Council will need to lead this negotiation process as several adjoining landowners are strongly opposed to the proposal if this shared path proposal is to proceed.

6.3.1 The Gap to Waratah Bay

Given that the purpose of the shared path was to link the two townships, a significant omission in the drive to develop the Waratah Way has been the resolution of: "where do the pedestrians, cyclists, and horse riders go after reaching The Gap from Sandy Point?"

Apart from the beach, the current link could be along an existing path in the Waratah Bay foreshore (SGSC) to west of Waratah Camp and entering Gale Street, a 100kph speed limit road.

This road is flanked by hedged Banksia Woodland vegetation on the south foreshore side and very narrow shoulders both sides of the road seal. The northern side of the road reserve is cleared, with scattered mature Banksias and Melaleuca Thickets further west.

The road cuts through a large dune to the west creating steep embankments.

The powerline servicing Waratah Bay also runs through the northern strip of the road reserve. Immediately off the narrow shoulder on the northern side, the profile drops away into low lying land subject to inundation.

There are no easy solutions here.

One primary aim of the shared path is to provide a safe walking and cycling environment for users (or it won't be used, especially by families).

By designating the road, a shared path, Council has a duty of care to the users by applying recognised standards to achieve a safe passage.

Design standards (Austroads) require a minimum of 9 metres separation between walkers/cyclists etc. and vehicular traffic on a 100kph signed road or use of a physical separation barrier.

The 9 metre separation would be unachievable in the existing road reserve and a barrier ("W" section) would be prohibitively expensive (\$200 / lineal metre x 1600 metres x 2 (both sides) = <math>\$600,000.



Gale St Looking West





Review of 2010 Paths & Trails Strategy

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Solutions may include:

- Reduce speed limit to 80kph.
- Where possible (northern side) construct a 2.5 metre wide coloured sealed shared path delineated with flexible guide posts, the colour difference and posts act as visual triggers for the motorists.
- Would require substantial fill/earthworks.
- Land purchase of adjoining farmland, estimated area 625 metres x 5 metres, parallel to the fence line from Camp Waratah to west of the dune cutting to avoid the dune and mature banksias.
- Purchase 1,666 metres x 5 metres of farm land parallel to the north side of Gale St and completely avoid the road reserve. This still would require substantial earthworks due to the land being very wet. Avoids traffic, powerlines, dunes, vegetation removal.

The preferred option would be the latter, 2.5 metre wide compacted gravel shared path, with land purchase (by negotiation).

Cost estimated at \$335,000. This figure is subject to variation depending on the outcomes of further investigations and surveys.

Note: See *Appendix 3* for indicative costs for various options for The Gap to Waratah Bay (Gale Street) shared path.

Total Waratah Way cost:

Option 1 (Ethos 2016) = \$525,000

Gale St land purchase option = \$335,000

Total estimated cost = \$860,000 (conditional on the outcomes of

surveys, Cultural Heritage Management

Plan (CHMP), vegetation offset requirements, land purchases).

6.3.2 Consultation / Research

Consultation and research included:

- A desktop review of Council's relevant plans and strategies including the Ethos report and others.
- Review of Community plans, letters and submissions.
- Meetings with Council staff.
- Informal community discussions with the project's proponents.

6.3.3 Map of Waratah Way



Possible path route scenario using farm land:



6.4 Acacia Way, Walkerville

The Walkerville Residents and Ratepayers Association Inc. are proposing the construction of an 800-900 metre long pedestrian safety walking path along Acacia Road (Fish Creek - Walkerville Road) Walkerville. The purpose is to allow residents and visitors to the Promontory Views Estate to safely walk from the estate along Acacia Street allowing access to the existing tracks that lead to lookouts over Waratah Bay to Wilsons Promontory and further south to the path system in the Cape Liptrap Coastal Park. One track leads down the escarpment onto the beach at the rear of the Walkerville Caravan Park.

The route would run parallel to Acacia Road on the eastern side either:

- In the road reserve skirting the power poles; or
- Immediately adjacent to the road reserve in the Cape Liptrap Coastal Park.
 This is crown land managed by Parks Victoria.

The image below is from the Walkerville Residents & Ratepayer's Association grant submission to SGSC in 2016.



Site Plan - Proposed Waking Path

This proposal consists of a 900 metre, 2.5 metre wide compacted gravel shared path with 4×4 metre long timber boardwalks at an estimated cost of **\$92,000**.

Issues include:

- Siting of path, i.e. Road reserve or Crown Land adjacent.
- Future maintenance responsibility.
- How will powerline maintenance vehicles, Parks Vic, and CFA vehicles etc. effect/impact the gravel path when they need to access the coastal park?
- What happens to users at the southern end near the Walkerville / Cape Liptrap intersection? Ideally, they cross Acacia Rd. to access the walking paths to the beach.

6.4.1 Consultation / Research

Consultation and research included:

- A desktop review of Council's relevant plans and strategies and others.
- Review of community plans, letters and submissions.
- Meetings with Shire staff.
- Informal community discussions with the project's proponents.

6.5 Walkerville Foreshore Shared Path

Together with the upgrade of the seawall and parking area at Walkerville North, the Walkerville Foreshore Reserve Committee of Management has proposed the construction of a 1335 metre (approx.) shared path along Bayside Drive, from the caravan park in the north to the boat ramp in the south. This proposal will be addressed in more detail in the forthcoming Walkerville Foreshore Management Plan.

Briefly, it will allow the safer passage of walkers and cyclists along the foreshore (beachside). Currently users meander along either side of the road verge.

Issues to consider:

- The width of the existing shoulder.
- The extent of coastal erosion.



- Vegetation removal required.
- Bridges, boardwalks over creeks/drains.
- Powerlines are in the eastern side of the road reserve.

6.6 Mossvale Park

The Mossvale Park Committee of Management (a S86 committee to Council) intends to include in their 2018 Management Plan an extended network of paths within the park to allow all ability access to views currently inaccessible to many visitors.

The original 1998 management plan by Andrew Paget included boardwalks across the wetter flood prone areas and graded gravel paths connecting existing paths and points of interest to the hill overlooking the park. The current proposal builds on that initial 1998 concept and will allow all users in most weather conditions access to the superb tree plantings and views found on the hill. The current popularity of the park (particularly during concerts and events) has been adding pressure to the parks' environment by introducing large numbers of people to the park. Without the corresponding infrastructure that would help manage and minimise the negative impact to the many heritage listed trees, compaction and vandalism will continue to pose a threat. The path network will create a circuit, and add interest by appropriately guiding visitors around the park between points of interest thereby adding value to an already iconic park.

Details will be developed in the proposed 2018 Mossvale Park Management Plan.

6.6.1 Consultation / Research

Consultation and research included:

- A desktop review off Council's relevant plans and strategies and others.
- Review of Community plans, letters and submissions.
- Meetings with Shire staff.
- Informal discussions with the project's proponents.
- On site visit.

6.7 Agnes River Road Walk

This walk leads from the GSRT north along Gassons Road, across the South Gippsland Highway, then north along the Agnes River Road via made and unmade road reserves to the Agnes Falls Reserve. The proposal consists of a gravel shared path approximately 5 km long. This track traverses some very steep hill country allowing for extensive views of Corner Inlet and Wilsons Promontory. Historically a through-road until the death of a grader operator in the 1960's, the route has continued to be used by walkers and horse riders and may be open in the future to adventurous cyclists. This proposal is in its very early stages of development (Council did a desktop cost estimate) and has been included in the review to acknowledge its potential.



View from Agnes Falls Road South to Wilsons Promontory



6.7.1 Consultation / Research

Consultation and research included:

- A desktop review of Councils' relevant plans and strategies and others.
- Review of Community plans, letters and submissions.
- Meetings with Shire staff.
- Informal discussions with the project's proponents.

6.8 Mountain Bikes

Mountain Bike circuits are growing across Australia as the sport develops. Being an Olympic sport has given the sport some high-level credibility throughout the riding fraternity. The development of circuits such as the one at Forrest in the Otway Ranges has given the township a much-needed boost (www.rideforrest.com.au/). A new brewery and shops sees the town full of riders and visitors on most weekends. This circuit hosts local, state and national competitions and is open to all users during the week.

As many more of these mountain bike circuits are springing up, it would seem South Gippsland with its natural attractions is missing out on this opportunity. Nothing has progressed in seven years after the 2010 strategy identified Mountain Bike riding as a new tourism venture catering for a younger demographic.

Recently a meeting was held in Foster resulting in the formation of a Mountain bike club. The Gippsland Mountain Trail Bike group (MTB) assisted in the development of this embryonic club by guiding members through the process. The Gippsland MTB Inc. is an active mountain bike association established to support and encourage the sport of mountain biking in Gippsland.

A mountain bike trail runs through Cement Creek Natural Features Reserve (Parks Vic) linking to the Great Southern Rail Trail at Foster Station Park. The circuit of 5km was used for a mountain bike championship held in February 2015. This site presents Council with a great opportunity to support this fledgling group and thereby opening the sport to the wider community with an Olympic standard course. The Prom Coast MTB has plans to develop the Cement Creek Natural Features Reserve into a world class mountain bike facility.

Several other sites in South Gippsland hold informal club events and are used in an ad hoc manner. The sites are; Mirboo North (plantation private land), Hallston (also has motorbike conflict issues) and Wuchatsch Reserve (SGSC) north of Nyora. None of these sites are formalised MTB trails and there can be regular conflict issues between land managers and differing users.

Ideally these four sites could be developed to cater for a range of users, each site offering different challenges e.g. Cross country (an Olympic event), cyclo cross, downhill, gravity enduro, marathon, trials, school events and 24-hour events to name a few.

6.9 Coal Creek to Ritchies Reserve

It is recommended that this "missing link" in the walking trail be included in the strategy to facilitate completeness of this trail. Subject to further investigation, it maybe be possible to complete the trail using a footpath extension, in which case it would be included in the Footpath Extension Program.

6.10 Shared Path Between Isabella Boulevard and Hannah Rise Crescent

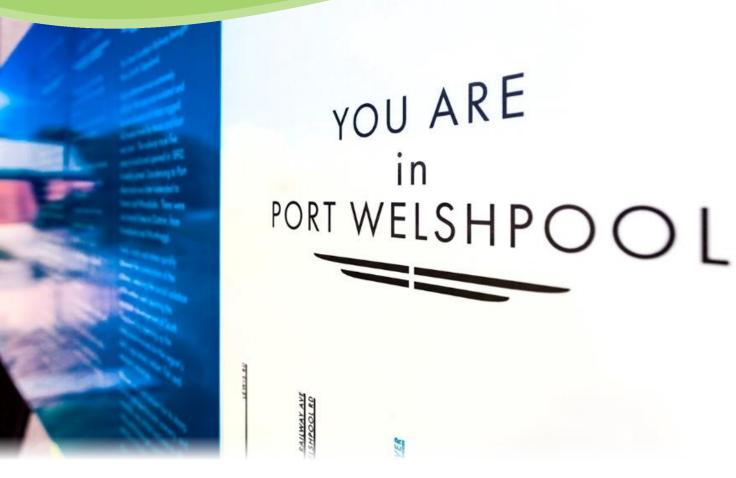
This is recognised and shall be a requirement of future sub-divisions in the area between Isabella Boulevard and Hannah Rise Crescent.

7. 2017 strategy review



It is proposed to conduct an annual desktop review and update of the 2017 Strategy and to undertake a full review on a 10 year cycle.

8. action plan



The following table sets out the 2017 Paths & Trails Strategy Action Plan that includes Marketing, Education, Management, and Development with the aim of making South Gippsland environments conducive to cycling, walking and horse riding, maximising economic opportunities and increasing resident's quality of life. The actions are for consideration by the relevant organisations. As most are unfunded, they will need consideration in future budgets.



8.1 2017 Strategy Action Plan

	STRATEGY / ACTIONS	LEAD ORGANISATION	TIME FRAME					
1	Promotion & Encouragement							
1.1	The SGSC provide strong advocacy for the continued development of the Great Southern Rail Trail.	SGSC, GSRT CoM DELWP Vic Track	SGSC Priority Project 2017/18					
1.2	The SGSC actively source funding opportunities in conjunction with other government authorities to enable the development of the Korumburra and Leongatha (and others) station sites as community assets.	SGSC (Strategic Planning & Community Strengthening Units), Vic Track	2-4 years					
1.3	Ensure that accommodation providers and tourist information centres provide up to date information regarding cycling / walking / riding opportunities in the region through the production (as required) of information brochures.	SGSC (Economic Development & Tourism Unit)	Ongoing					
1.4	Continue to assist clubs and organisations to lobby for and stage major cycling/walking and equestrian events and tours to use the Region.	SGSC (Economic Development & Tourism, Community Strengthening Units)	Ongoing					
1.5	Encourage the development of bicycle hire opportunities in Foster, Mirboo North, Korumburra and Leongatha.	SGSC (Strategic Planning, Economic Development & Tourism, and Community Strengthening Units)	Ongoing					
1.6	Encourage accommodation providers to meet the needs of touring and	SGSC (Economic	Ongoing					

	STRATEGY / ACTIONS	LEAD	TIME FRAME
		ORGANISATION Dovolopment 9	
	recreational cyclists, (i.e. safe bicycle storage provision).	Development & Tourism Unit)	
1.7	Update Council's mapping system to	Assets,	Ongoing
	reflect current paths and trails across the Shire.	GIS mapping	
2	Marketing		
2.1	Increase the profile of South Gippsland as a walking, cycling and riding destination.	SGSC (Economic	2-5 Years
		Development & Tourism Unit)	
3	Education & Encoura	agement	
3.1	Council could provide leadership for the	SGSC	Ongoing
	development of special events and services to encourage a greater level of	Community Strengthening	
	cycling, walking and riding amongst all	Unit)	
	members of its community.		
3.2	Continued assistance to and sponsorship, when funding / grants available, of	SGSC (Social Planning Unit)	Ongoing
	organisations and programs that	r lanning offic	
	facilitate bicycle, walking, and riding		
	education programs, particularly schools. Continue to support VicHealth's Walk to		
	School program and associated activities.		
3.3	Get behind the promotion of local,	SGSC	Ongoing
	regional, and state wide cycling	(Community	
	encouragement events and programs, such as the 'Ride to Work Day'.	Strengthening Unit)	
4	Infrastructur	,	
4.1	Undertake maintenance of existing	GSRT CoM,	Ongoing
	pedestrian / cycling assets including	SGSC & other	
	paths, trails, signs and information boards in accordance with a maintenance plan	management organisations	
	and budget of controlling / management	organioations	
4.2	organisations. In accordance with the priorities identified	SGSC	1-10 years
	in <i>Appendix 1</i> adopt and implement as		o y caro
	funding becomes available. Include		



South Gippsland

			South Gi
	STRATEGY / ACTIONS	LEAD ORGANISATION	TIME FRAME
	allowances in annual budgets for maintenance.		
4.3	Advocate for a Municipal Bicycle Network, a Regional Bicycle Network, and recreation links, for details see <i>Appendix 1</i> in conjunction with maps.	SGSC Priority Project (All Units)	0-10 years
4.4	Advocate for responsible authorities to consider adopting a policy of sealing shoulders on roads where double centrelines occur for the safety of cyclists.	SGSC (Infrastructure Planning & Infrastructure Delivery Units)	Ongoing
4.5	Provision of permanent 'noticeboard' type maps as part of any cycling, pedestrian, riding facility development, particularly along 'shared paths', when funding becomes available.	SGSC, GSRT CoM	0-10 years
5	Management & Deve	elopment	
5.1	Council will consider, if changes are made to any road, the provision for cyclists will be assessed as part of the road design. Council will also closely liaise with VicRoads to consider, in any new designs for Highways or arterial road realignments, the provision of safe and convenient pedestrian crossings and bicycle facilities.	SGSC (Strategic Planning, Infrastructure Planning, and Infrastructure Delivery Units)	Ongoing
5.2	Formation of a coordination committee or similar to oversee the implementation of the South Gippsland region bicycle, walking, riding, paths, and trails facilities and that it be made up of one representative from each of the following organisations: SGSC (Recreation Committee) VicRoads DELWP Parks Victoria	SGSC (Community Strengthening Unit)	0-1 year

	STRATEGY / ACTIONS	LEAD ORGANISATION	TIME FRAME
	 Prom Country Tourism, and 		
	adjoining shires		
5.3	Collect data to help support or clarify	SGSC	Ongoing
	project priority assumptions (see PPM).	(Economic	
	This data will in turn assist in Council's	Development &	
	decision making process. Sophisticated	Tourism Unit)	
	counting techniques, (student driven)		
	surveys of users, economic modelling,		
	and surveys of businesses regarding		
	cause and effect of decisions associated		
	with the Paths & Trails Strategy be		
	undertaken when resources / funding		
	becomes available.		

9. appendices



9.1	The 2017 Project Priorities	p.57
9.2	Costs Table	p.58
9.3	Gale Street Preliminary Costs for "Waratah Way"	p.60
9.4	References	p.62

9.1 **2017 Project Priorities**

Construction Projects

Ranking	Projects
1	The Great Southern Rail Trail - Leongatha to Nyora
2	The Great Southern Rail Trail - Welshpool to Hedley (Shire boundary)
4	The Great Southern Rail Trail - Nyora to Shire boundry
5	Leongatha: Bair Street, laneway between 21 & 23 Bair St to Leongatha Station
6	The Great Southern Rail Trail - Nyora to Anderson Rail Trail
7	Leongatha: From McDonald St Reserve, along Coalition Creek reserve, Boags Rd to GSRT
8	Leongatha: Louise Simon Court to MacDonald Street, Shared path
9	Walkerville North: Bayside Drive, along beachside shoulder of road reserve
10	Nyora: Pony Club to Nyora Common along Patman Drive
11	Venus Bay: Van Cleef reserve. Path network, to be developed in Master Plan
12	Walkerville: Acacia St path
13	Loch: Loch Lap — Sunny Side Park along Highway reserve and along western entrance to bus stop then pick up / connect to existing footpath
18	Toora: Agnes Falls link to GSRT
23	Korumburra: Skip Walking Track. Creek reserve, existing road & rail reserves including Coal Creek to Ritchies reserve ink (almost complete)
27	Foster: Stockyard Creek, Pearl Park to GSRT
30	Fish Creek: Mt Hoddle Walk
31	Berrys Creek: Internal path network at Mossvale Park
44	Coastal Walking Track: Venus Bay - Cape Liptrap - Bell point - Walkerville - Waratah Bay - Sandy Point - Shallow Inlet - Adams Rd - Yanakie - Shelicot Road - Port Franklin - Barry Beach - Port Weishpool. Incorporating Cooks Creek - Waratah Bay Walk, etc
51	Foster: Mountain Bike circuit
54	Mirboo North: Mountain Bike circuit
55	Nyora: Mountain Bike circuit, Wuchatsch Reserve

On-road linemarking & Signage Projects

Ranking	Projects	
14	Foster: Station Street, from Pearl Park linking to Rail Trail	
15	Korumburra: Shellcotts Road - Guys Road to Ayrlie Park Crescent	
16	Sandy Point: Acacia Street, Graeme Grove, Woodland Avenue to Manuka Street link to Ray Henderson Walk	
19	Foster: Fish Creek Foster Road, from Reserve Street to Pioneer Street / Bridge Street, ie Swimming pool via Secondary College to Town centre	
21	Welshpool: South Gippsland Highway (Main St) – cycle lanes Primary School to walk bridge. Investigate off-road facility	
22	Korumburra: Victoria Street, Bridge Street to Recreation Reserve / Showground	
24	Venus Bay: Canterbury Rd, linemarked cycle lanes, shops to Lees Rd, No. 3 Beach Rd to 3rd Estate & return	
25	Leongatha: Young St - McCartin St to Bruce St then to Holt St	
28	Korumburra: Princes Street, Bridge Street to Jumbunna Road	
32	Meeniyan: Hanley Street, linemarking & signage	
33	Korumburra: from George Street to Victoria Street	
34	Korumburra: South Railway Crescent from Waiters Mine to Mionis St & Coal Creek	
38	Mirboo North: Strzelecki Highway - Balook St to left turn prior to Grand Ridge Rd	
39	Leongatha to Mirboo North	
41	Venus Bay: Possible line marked cycle lane Lees Rd, one way wes to east	
42	Venus Bay: Circuit from Fishermans Jetty to Canterbury Rd	
45	Leongatha: Roughead Street - South Gippsland Highway to Yarragon Rd / Wild Dog Rd intersection	
52	Tarwin Lower to Walkerville / Fish Creek	
53	Korumburra: Bridge Street - Princes Street to Victoria Street	

Projects on VicRoads Roads

Ranking	Projects
3	Korumburra: Jumbunna Road, Secondary College to Guys Rd
17	Leongatha: South Gippsland Highway, Allison Street to McCartin Street
20	Leongatha: Ogilvy Street, including South Gippsland Highway intersection south-east to the Secondary College main entrance
26	Leongatha: Bass Highway/McCartin Street, from Cemetery to Peart Street
29	Korumburra: Radovick Street, Guys Road to Commercial Street (South Gippsland Highway)
35	Leongatha: Peart Street, Allison Street to McCartin Street
36	Leongatha: South Gippsland Highway, The Bridge to Anderson Street
37	Korumburra: Richard Street - Princes Street to South Railway Crescent
40	Foster to Wilson's Prom – Foster-Prom Rd
43	Korumburra: Station Street - Bridge St to Bourke St
46	Leongatha: to Inverloch Rd (Bass Highway) cycle lanes
47	Leongatha: Turner Street - South Gippsland Highway, east to Roughead St
48	Foster to Wilson's Prom –Fullers Rd, Black Swamp Rd, Foster-Prom Rd. Lester Rd, Shallow Inlet, Milliars Rd, Foster- Prom Rd
49	Meeniyan to Tarwin Lower – via Lower Tarwin Rd, linemarked cycle route, 2-way signed
50	Nyora: Davis st/Forster Dve to Glover Rd, links develop zone

Hallston: Mountain Bike circuit

Korumburra: Shared path Isabella Boulevard to Hannah Rise



9.2 Costs Table

ITEM	UNIT	\$/UNIT
Line Marking 100m	lm Im each m ²	\$5.00/ \$1.00/ \$80.0 \$40./m ²
Supply & install sign & post	each	\$250
4" X 2" pine edging	lm	\$15.00
Earthworks general	m ³	\$40
Concrete path, 2.5m wide	lm	\$200
Concrete path, 1.5m wide	lm	\$130
Gravel path, 2.5m wide	m ²	\$40
Asphalt path (hot mix), 2.5m wide	m^2	\$75/m
Tree clearing	lm	\$15
Road shoulder – bitumen	km	\$40-50,000
Road shoulder – gravel	km	\$20-25,000
Bituminous primer seal	m ²	9
Excavation for path - estimate	m ³	10
Supply, place, and compact gravel base	m ²	40
Bituminous primer seal (road verge pathway)	m ²	9
Concrete kerb	m	110
Supply & install 'W' section guardrail	lm	200
Culvert drain extension 1x225 dia. RRJ RCP	ea.	300
Culvert drain extension 1x300 dia. RRJ RCP	ea.	410

ITEM	UNIT	\$/UNIT
Culvert drain extension 1x450 dia. RRJ RCP	ea.	600
Culvert drain extension 1x525 dia. RRJ RCP	ea.	750
Culvert drain extension 1x900 dia. RRJ RCP	ea.	2100
Boardwalk (timber)	m ²	400
Supply and install bollards	ea.	100
Supply and install seats	ea.	2000
Supply and install picnic table and seating unit	ea.	2400
Supply and install bicycle rails	ea.	400
Relocate existing signage	ea.	60
Geofabric placed on unstable ground	m ²	2



9.3 Gale Street Preliminary Costs for "Waratah Way"

The following estimates are for a shared path from the 'Waratah Camp' exit to the Gale St reserve, Waratah Bay, assuming the existing path from 'The Gap' to opposite Waratah Camp is suitable. Length 1900 metres.

			*REFER TO NOTES BELOW					
ITEM	UNIT	\$/UNIT	OPTION A	OPTION B	OPTION C	OPTION D		
Distance			1900	1900	1900	625		
Land purchase price					4165	1562		
Widen road shoulders (path width metres)			2.0	2.5				
Clear vegetation (some sections will not need clearing)	m²	15	71250	17812.50				
Earthworks fill and form up low areas	m³	40	-	76000	130000			
Path type								
Compacted gravel rolling surface as per GSRT (DeMerlos?) @150mm depth	m²	15	114000	71250	201250			
Spray seal buff coloured (including forming & gravel base)	m²	35	266000	166250	296250			
Asphalt seal buff coloured (including forming & gravel base)	m ²	60	399000	199500	415000			
Concrete (including forming & gravel base)	m ² @100mm	120	684000	342000	700000			
Guideposts	ea	40	28500	14250				
Signage x 4	ea	200	500	500				
Boardwalk	lm	400			1300000			

	*REFER TO NOTES BELOW			
ITEM	OPTION A	OPTION B	OPTION C	OPTION D
Totals				
Compacted gravel	214250	179812.50	335915	
Spray seal	366250	198812.50	300915	
Asphalt	499250	232062.50	419665	
Concrete	898250	450562.50	704665	

Additional costs include extension of studies quoted in Ethos report eg. Vegetation offsets, CHMP, drainage. Note: very wet low lying area, survey, design etc still required.

OPTIONS

- A. Gale St @ 80km/h road reserve (r/r) both sides 2.0m wide off shoulder.
- B. North side r/r only @ 2.5 m wide away from shoulder in r/r may have to bend / narrow path to allow for power poles.
- C. Purchase farm land 5.0m wide easement for a 2.5m wide path
- D. Purchase farm land 5.0m wide easement for a 2.5m w path from Waratah Camp then onto r/r



9.4 References

9.4.1 Design Standards

- Austroads Guide to Road Design Part 6A: Pedestrian and Cyclists
- Austroads Pedestrian-Cyclist Conflict Minimization on Shared Paths and Footpaths
- AP-G88-17 Cycling Aspects of Austroads Guides
- Universal Design Principles
- SGSC Infrastructure Design Manual
- Prioritisation of Bicycle Infrastructure Proposals; Australian Bicycle Council
- VicRoads; SmartRoads February 2015 Guidelines

9.4.2 Strategic Documents

National

- Gearing up for Active and Sustainable communities: Australian National Cycling Strategy 2011-16
- National Cycling Strategy 2011-16 2016 Implementation Report Austroads

State

- Summary_Cycling_Participation_Survey_2017_Vic
- Shared Paths Position Statement Victoria walks
- Victorian-Cycling-Action-Plan-2013-14 (1)

Local Plans and Strategies

- SGSC Council Plan 2017
- Asset Management Strategy 2017 (26 April 2017)
- Community Strengthening Strategy 2008 2010 (21 May 2008)

- Economic Development & Tourism Strategy 2015-2020 (26 November 2014)
- Long Term Financial Strategies (14 December 2016)
- Paths & Trails Strategy 2010 (24 November 2010)
- Recreational Vehicle Strategy (28 May 2014)
- Road Management Plan (28 June 2017)
- Social Community Infrastructure Blueprint (24 September 2014)
- Mirboo North Community Report
- Nyora Community Plan Final 2010
- Loch Community Plan Final 2010
- Mirboo North Structure Plan
- Leongatha Streetscape Master Plan
- Foster Community Report 2016
- Foster Community Infrastructure Plan 2016
- Leongatha Community Infrastructure Plan 2014
- Korumburra Structure Plan 2014
- Venus Bay Community Report
- Korumburra Engagement Plan
- Tarwin Lower Venus Bay Community Infrastructure Plan (June 2014)
- Seasonal Population Impacts in Coastal Towns Plan 2015
- Waratah Bay Foreshore Management Plan 2015
- Nyora Development Strategy 2016
- Sandy Point Community Plan
- Cape Liptrap Coastal Park Management Plan, Parks Vic
- Walkerville Foreshore Management Plan
- Foster Streetscape Design

paths & trails strategy 2017



- Preliminary Geomorphological and Ecological Investigation:
 Sandy Point to Waratah Bay Shared Path 2016, Ethos NRM Pty Ltd
- Off Road Shared Trail between Sandy Point and Waratah Bay Presentation to SGSC (17 May 2017)
- Hoddle Mountain Trail Management Committee Presentation to SGSC (17 May 2017)
- Meeniyan Structure Plan (July 2013)

