

Pathways Strategy

*Connecting
Communities*

2012 Review

PART A

Process, Background Policies
and Recommendations



**PRODUCED BY
SURF COAST SHIRE
COUNCIL**



EXECUTIVE SUMMARY

Pathways have been identified as a major item of infrastructure required by the residents and visitors to the Surf Coast Shire. The many natural attractions within the Shire make it an ideal and desirable location for walking and cycling but the major road crossings and old pathway infrastructure means that the community is requesting more and improved pathways.

In 2006, Council adopted a Pathway Strategy following consultation with the community. The adopted plan provided a strategy to improve pathways throughout the Shire. In 2010, a review of this strategy was undertaken and included the following elements.

The Pathways Group, comprising Council officers from across departments, reviewed information on all the pathways in the Shire which had been completed and updated the plans and tables.

The Group maintained the range of path and trail types in the Surf Coast Shire as adopted in 2006:

- ◆ Regional Pathways that serve as arterial links joining towns and providing a facility of significance to the broader community.
- ◆ Shared Pathways that are the collector pathway systems within towns.
- ◆ Town Pathways that serve the local community linking peoples homes to the shared pathways.
- ◆ Bicycle routes that are the on road marked or signed bicycle network for both regional and local use.

This review included an online submission and a series of consultation workshops in six towns and also a workshop with land managers involved in the provision of pathways in the Shire. Any missing gaps were identified and the relevance of the previously identified network revised.

The funding priority scoring system was based on the Shire's capital expenditure priority system and was modified to make it relevant to pathway requirements. The following system was adopted:

Criteria	Definition	Score
Strategic Value / Transport Linkage	Considerations include links to existing pathways, key services and public transport.	40%
Usage / Need	Considerations include proximity of primary destinations, evidence of use.	20%
Safety / Environmental Consideration	Consideration – does it reduce conflict between path users and road traffic? What is sight distance like? Will consideration reduce impact on the environment?	20%
Community Desire	Is there strong community desire?	20%

In developing the costs of works, the following table was established based on current prices at the time the Pathway Strategy was developed for works.

Name	Indicative cost per lineal metre 2010/2011
Major Path MP	\$255 / m plain concrete
Major Path Gravel MPG	\$90 / m
Shared pathway SP	\$240 / m
Shared Pathway gravel SPG	\$70 / m
Pathway natural NP	\$1 / m for signs
Town Path TP	\$220 / m
Town Path Gravel TPG	\$55 / m
Exclusive Bicycle Lanes EBL	\$10,500 / km
Bicycle and Parking Lanes BPL	\$6,500 / km
Line and Symbol Treatment ETL	\$1,000 / km (line) and \$140 per bicycle symbol
Symbol only treatments ETL	\$2,5000 / km
Signs SNS	\$750 / km

In determining the funding required for each year undertaken, previous years allocations for pathways works and the future budget projections were considered.

The following recommendations for future Surf Coast Shire capital expenditure budgets have been developed:

Pathway Category	Annual Budget (Year 1-10)	
Regional Pathways	\$100,000	Shire Allocation
	\$50,000	External Funds
Shared Pathways	\$340,000	Shire Allocation
	\$34,000	External Funds
Town Pathways	\$200,000	Shire Allocation
	\$40,000	External Funds
Bicycle Routes	\$10,000	Shire Allocation
Surf Coast Shire Contribution	\$650,000 per annum	
External Funds	\$124,000 per annum	
TOTAL BUDGET	\$774,000 per annum	

Note: It is expected that these budget allocations will increase in line with CPI increases

The 2012 Pathway Strategy identifies just over \$37 million dollars of Pathway works, of which approximately \$24.9 million are under the responsibility of the Surf Coast Shire (including developers). It was therefore important to prioritise these pathways so that a realistic 10 Year Shire Priority Works Program could be developed.

A proposed budget was developed which recommends that the future budgets to be allocated by the Surf Coast Shire are \$650,000 per annum for each year. In addition to this funding, the program includes an anticipated \$124,000 per annum contribution from external funds (external grants, special charges schemes). This provides a total budget allocation over 10 years of \$7.74 million with council contributing \$6.5 million.

Where a proposed priority pathway is indicated as the responsibility of another agency, the Surf Coast Shire would act as an advocate on behalf of the community for the provision of a priority pathway or in some cases may consider part funding pathways of community significance. There will also be occasions where recommended pathway routes will be realigned or revised when further detailed consultation and investigation is undertaken with other land managers.

The following table summarises the recommended Surf Coast Shire funding for the Pathways Program:

Surf Coast Shire Pathways Strategy Identified Costs	Budget
Surf Coast Shire	
A: Shire Funds	\$6.5 million
B: External Funds (grants, special charges schemes)	\$1.24 million
Total 10 Year Works Program	\$7.74 million
Surf Coast Shire (Other identified pathways outside of 10 year program)	\$13.26 million
Total Surf Coast Shire Identified Pathways	\$21 million
Other Land Managers Potential Pathways	\$16 million
Total Identified Pathways within the Pathways Strategy	\$37 million

The Pathways Strategy *Connecting Communities* is divided into two parts. **Part A** includes the **Process** undertaken to complete the Strategy Review, the **Background** information which influenced decision making, the adopted **Policy** areas that apply to all potential pathways, the **Recommendations** required to facilitate the implementation of this Strategy and the Surf Coast Shire **Budget** required to complete a priority 10 Year Works Program.

Part B of the Strategy includes the **Works Tables** and **Township Plans**. This part is a “living” document to be annually revised and updated as new paths are completed, budgets are prepared and new strategies, masterplans and development plans are prepared.

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Introduction

The Surf Coast Shire is a rural municipality with a resident population of approximately 28,631. The forecast population for the Surf Coast Shire shows a rapid increase to over 44,000 residents by 2031. (Source: *forecast.id*). A significant reason for this increase is the “Seachange” phenomenon which brings with it many challenges to service the needs of a rapidly growing population.

The population grows significantly during holiday periods as the Surf Coast Shire is a major destination for weekend leisure and travel. The Shire has major population centres at Torquay, Anglesea, Lorne and Winchelsea, and other smaller townships along the coast and inland. The peak overnight population in many of the Surf Coast Shire’s coastal towns can swell to 10 times the permanent population rate. (Source: *City of Greater Geelong Economic Indicators Bulletin 03/04*).

The Shire’s attractions include extensive surf beaches, attractive bush scenery, the Otway Ranges and the world famous Great Ocean Road. As the Surf Coast Shire is close to Melbourne, the area attracts very high numbers of international and domestic tourists.

The region provides for a wide range of recreation activities but there is the need to develop a strategy to improve the provision of pathway facilities for walkers, cyclists and other pathway users.

A review of the 2006 Pathway Strategy was required given five years of works had been completed.

The need for pathway improvement is also acknowledged in recently completed strategies and programs including the Open Space Strategy, Road Safety Strategy, Great Ocean Road Trail Study, the Access and Inclusion Plan and the Walking School Bus Program.

Council has updated details of all existing pathways and produced township plans showing their current location. The existing pathways include footpaths, shared pathways, on road bike lanes and walking trails.

Council has a Pathways Group made up of staff from across its various Departments including Recreation, Rural Access, Infrastructure, Planning, Environment, Parks and Open Space and Community Development. This group undertook the review.

1.1 Benefits of Providing Pathways

The Surf Coast Open Space Strategy prepared by the Surf Coast Shire in association with Robin Crocker and Associates identified many of the needs and benefits of a pathway system.

“The health and environmental benefits of walking and cycling are well established and research indicates a significant demand for safe off-road recreational paths, preferably with opportunities for circuit walks and rides. Safe cycling (often on-road) in residential areas and to community facilities, schools, the foreshore and open space is also important.

The Surf Coast Shire is well placed to improve walking and cycling opportunities and to reduce motorcar use, particularly near the coast. With improved access, particularly for pedestrians, parking along the coast can be reviewed with the potential to make parking areas less dominant and foreshores safer and more pleasant for users.

Surf Coast has good walking paths, eg the Surf Coast Walk, but few shared walking/bicycle paths and limited footpaths, particularly in parts of Anglesea and Torquay.

There are many opportunities to develop paths, particularly in the larger towns and popular visitor destinations. Where possible these should provide loop routes and link and upgrade existing paths and footpaths. The best opportunities are often along waterways and foreshores where impacts are acceptable.

Council needs to ensure that sufficient land is acquired or set aside in open space to provide for paths to be constructed in the long-term.

The Community Plan “Your Visions” process and meetings held for Open Space Strategy found that many people would like to see more footpaths and safer crossing of main roads, particularly the Great Ocean Road at Anglesea. This was also identified in the Access and Inclusion Plan.

Some towns do not have footpaths, sometimes leading to dangerous situations with people walking and pushing prams etc on fairly busy, narrow roads. In some areas residents have taken over ‘nature strips’ with rocks, barriers, plantings, and parked vehicles. This is inappropriate where access is impeded, and regulations, education and enforcement are desirable to retain public access (and limit planting to indigenous or other agreed species). Pedestrian access on at least one side of each road (except where there are obvious physical constraints such as steep slopes, or very little need for a path) is also desirable.

As in other Shires, the Council recognises the need (and obligation under legislation) to provide access for all people in the community, particularly those with limited mobility.

Paths and facilities should be designed and constructed to meet disability standards and encourage use. There are, however, many current sites with uneven ground, inadequate facilities and paths with steep and rough surfaces unsuitable for a significant proportion of the population and visitors. Existing facilities should be progressively upgraded and steep and uneven paths need to be realigned and provided with non-slip surfaces.”

Walking and cycling can provide direct personal benefits for individuals and significant community and economic benefits. The Shire can improve the recreation and travel experience of residents and visitors by improving walking and cycling opportunities and safety through better paths and trails.

Walking and cycling are popular, enjoyable, healthy, non-polluting, inexpensive, practical transport and recreation activities. Most people can use these forms of transport for at least a proportion of their travel needs and gain substantial personal benefits in health and cost savings. They also provide social interaction and contribute to environmental improvement. As fuel prices continue to rise, it is realistic that walking and cycling will, by means of necessity, be the required mode of transport whenever possible and practical. Reduced fuel consumption, less pollution and a greater appreciation of and respect for our natural environment will be obvious benefits. Cycling is a cheap form of transport, costing about 1c/km compared to over 50c/km for a car.

Cycling has often been seen only as a problem of road safety by traffic managers and not recognised as a means of achieving benefits for a range of Shire objectives such as health and recreation.

Walking has only recently been recognised as a major tool in the fight against obesity and the sedentary lifestyle of many Australians. The concept of “walkable” communities is starting to gain the attention of communities, agencies and the Government. “Walkability” refers to enhancing the livability of an area by creating pathways that enable people to access all the facilities and features of that area without having to use a motor vehicle. Walkability infers a greater connection within that community as people are more able to walk and ride and in the process receive exercise and social connections. Walkable communities are more liveable communities and encourage healthier lifestyles for the people who live in them.

Walking and cycling are good for health. The Australian population has become inactive and health agencies now have to deal with the illness burden arising from this reduction in physical activity. A sedentary lifestyle can lead to coronary heart disease, stroke, obesity, and diabetes.

Regular exercise by walking and cycling:

- ◆ reduces cholesterol level
- ◆ Reduces the risk of death from high blood pressure
- ◆ reduces the risk of heart disease by about 30%
- ◆ has a low risk of injury compared to many other recreation activities

The effectiveness of the Shire’s Municipal Health Plan will be enhanced with a greater focus on building active and healthy communities. Activities such as walking and cycling promote exercise which reduces many health concerns.

Improved cycling opportunities can be expected to provide significant tourism benefits, improving cycling access to popular locations in the Shire, and increasing the length of stay of some visitors by extending recreation opportunities. The community push for path facilities will continue to grow as health, lifestyle, and environmental issues become a more important part of the local, state and national agenda.

2. Methodology

The review of the Pathways Strategy has involved a considerable amount of consultation with the community, agencies and internally within the Surf Coast Shire. The model used has been integrated planning.

2.1 Review of existing data

The basic information on the trails, paths and informal links is detailed in the 2006 Strategy and has been reviewed to identify paths completed since 2006. This extensive database has been mapped and compiled into tables that not only identify the type, length, width and location but also other information such as pavement material and condition.

2.2 Categorisation

The Pathways have been categorised into the types of paths and trails to be used in Surf Coast Shire. The adoption of these trail hierarchies was made in the 2006 Strategy.

2.3 Community Consultation

The current networks and links were identified on plans and taken to a series of community meetings. Community meetings were held in Torquay, Aireys Inlet, Anglesea, Winchelsea, Lorne and Moriac as well as similar meetings with Council staff and other agency land managers.

The following table lists the towns and dates for the various meetings.

TABLE 1
List of Consultation Meetings -2011

No.	Township/Group	Date	Time	Venue
1	Land Managers	Thurs 17 August	10am – 12 noon	Surf Coast Shire Office
2	Torquay / Jan Juc / Bellbrae	Thurs 11 August	10am – 12 noon and 7pm – 9pm	Surf Coast Shire Office
3	Aireys Inlet / Fairhaven	Wed 29 June and Sat 2 July	10am – 12 noon 10am – 12 noon	Aireys Inlet Community Centre
4	Anglesea	Monday 4 July 2011	10am – 12 noon	Anglesea Community House
5	Winchelsea / Deans Marsh / Moriac	Tues 26 July	10am – 11am and 7pm – 8pm	Winchelsea Senior Citizens Centre
6	Lorne	Wednesday 13 July 2011	10am – 12 noon	Lorne Senior Citizens Centre

2.4 Submissions

In addition to the consultation session, there was an opportunity for people to make submissions either on line, or via Australia Post. By the closing date of 30 August 2011, 53 submissions had been received on line (refer D11/40715) and 31 written submissions had been received by post (refer D11/41122).

3. Surf Coast Shire Pathways Policy

Pathways are an important part of the infrastructure of the Surf Coast Shire that have been identified through the community planning resulting in the Surf Coast Shire Community Plan, other strategic planning processes such as the Open Space Strategy and through the interest and involvement of the community in the consultation for this Pathways Strategy.

The key requirement for the pathways is to develop infrastructure in all communities that will connect the communities and the people in those communities with the other facilities and services in those communities.

There are five important policy areas endorsed by the Surf Coast Shire through the development of this strategy. These policy areas are:

- ◆ Planning and Development
- ◆ Design
- ◆ Funding
- ◆ Pathways in New Estates and Developments
- ◆ Access for All

This Pathways Policy applies to new pathways that are being planned and developed.

3.1 Planning and Development

Pathways will be planned in a manner that provides the appropriate infrastructure that meets the needs of the community.

The planning and development of pathways will be undertaken in a manner that ensures they are:

- ◆ Walkable - people can easily walk to the facilities and services they want to get to and also along the many features of interest in the Surf Coast Shire.
- ◆ Cyclable - people must be able to cycle to the facilities and services they want to get to and also along the many features of interest in the Surf Coast Shire.
- ◆ Accessible - pathways must be accessible for all users. They must be built so that people of all abilities can use them.
- ◆ Permeable – the pathways must flow through an area so that places of interest can be directly accessed where appropriate.
- ◆ Safe and compliant with Australian Standards - pathway safety and road safety must be considered.

- ◆ Consistent with Council's strategic framework through the Council Plan, and engage the community where consultation is appropriate.
- ◆ Connected to key activity nodes.
- ◆ Connected to other pathways, regional trails, shared pathways and town paths.
- ◆ Supported by infrastructure, such as end of journey facilities, signage, seating and drink fountains where appropriate.
- ◆ Integrated with the environment and with the character of the town in which the pathway is to be constructed.

3.2 Design

The design of pathways will be undertaken in a manner that ensures that they:

- ◆ Maximise the number of users of the pathway.
- ◆ Have a suitable surface material for the major user groups purposes and the continuing use by all the people likely to use that pathway.
- ◆ Use materials of a high standard that is appropriate for the setting, the local community, and the character of the town.
- ◆ Consider, value and minimise environmental impacts during pathway construction and maintenance.
- ◆ Have a width that is sufficient for all users of the path and that consideration is given to the comfort of the users and the constraints of the site.
- ◆ Provide consistent access so that people are able to use the pathways for their activities without having to constantly move off the surface for other users.
- ◆ Engage the community in consultation where appropriate.
- ◆ Designed to cater for the anticipated higher levels of use of that particular pathway.
- ◆ Built to an accepted design standard so that they are economical to build and sustainable for maintenance and future replacement.
- ◆ Have good quality drainage so that paths are sustainable and easy to maintain.
- ◆ Are compliant with Australian Standards (e.g. Austroads Part 13 Pedestrian facilities and Part 14 Bicycle facilities and access requirements).
- ◆ Are accessible for people with all abilities.
- ◆ Are complimented by artistic features or landscape elements where possible to reduce the visual impact of the pathway.
- ◆ Consistent where possible, with the community vision for their town.

3.3 Funding

The Surf Coast Shire will contribute resources to the implementation of the Pathways Strategy.

The Shire will also commit to:

- ◆ Providing funding for the implementation of the Pathways Strategy taking into consideration available budgets throughout each year of the implementation plan and in accordance with the priority areas in the Works Program.
- ◆ Having a transparent and justifiable priority system that ensures that the community needs are met in an equitable and sustainable manner.

- ◆ Seek funding for regional pathways from State and Federal Government Departments and Agencies where there is a clear benefit to a range of visitors to the Shire.
- ◆ Where possible seek contributions from the people who benefit most from the development of the pathways.
- ◆ Ensure developers provide pathways in new estates that meet the guidelines and standards contained within Section 3.4 of this policy.
- ◆ Seek fair contributions to the costs of new pathways from residents of local areas and neighbourhoods where the pathways are primarily of benefit to them.
- ◆ Advocating for the community to other land managers for the construction or upgrade of priority pathways on land owned or managed by others. The community can also be advocates to other levels of Government.

3.4 Pathways in New Estates and Developments

Pathways in new estates and developments within the Surf Coast Shire will be planned, designed and implemented in the following manner:

- ◆ Adopt the principles of “walkability” in designing new estates or developments.
- ◆ Provide pathways as a basic requirement of the infrastructure for the development.
- ◆ Provide links with other pathways outside of the development.
- ◆ Provide permeability through the development and around the development.
- ◆ Implement pathways to the standards outlined in the Surf Coast Shire Pathways Strategy.
- ◆ Link to other key nodes of activity such as bus stops, shops, schools or recreational areas.
- ◆ Provide footpaths on at least one side of the road on all roads apart from courts.
- ◆ Provide safe pedestrian access within the development.
- ◆ Provide safe pedestrian access which connects outside of the estate or development including across roads.
- ◆ Provide pathways that are accessible to people with disabilities.
- ◆ That developers fund the planning, design and implementation of pathways within the development to the satisfaction of the Surf Coast Shire.
- ◆ Provide other associated infrastructure with pathways such as seating and resting areas.
- ◆ Design pathways that are complimentary and where appropriate, reflect the character of the area.

3.5 Access for All

The Surf Coast Shire will endeavor to:

- ◆ Develop new pathways that are accessible to all abilities.
- ◆ Allow people to travel continuously on pathways.
- ◆ Meet the standards as outlined in sections 3.1, 3.2, 3.3 and 3.4 of this strategy.
- ◆ Work in partnership with other agencies and land developers to ensure the policies in this strategy are implemented.
- ◆ Ensure that encroachment does not occur on Surf Coast Shire owned or managed land that impedes access and future pathway development (e.g. Vegetation on nature strips and claims of adverse possession).

- ◆ Support other agencies to ensure that encroachment does not occur on their owned or managed land that may impede access and the future development of pathways.
- ◆ Implement the outcomes of the Surf Coast Shire Street Furniture Policy and Footpath Trading Policy.
- ◆ Provide multi-use pathways wherever possible.

4. Types of Paths in the Surf Coast Shire

The various communities and agencies have identified many different types of pathways. In an effort to rationalize the types of works proposed, the following terms, hierarchy, types of construction and categories have been established.

4.1 Path Hierarchy

The first element to be considered is the hierarchy of pathways or the scale and importance of different pathways used for different purposes.

A hierarchy has been identified which simplifies the range of paths being considered and relates them to the location, attributes and the potential users.

The following attributes and terms were considered in developing the hierarchy.

TABLE 2
Definition of terms

Wide	Desirable width of 2.0 m to 2.5 metres for multi use pathways. Minimum 2.0 m adopted for use.
Smooth	An even surface over the width of the pathway.
Continuous	That there are no major interruptions along the pathway.
Sealed	That the pathway surface has a sealed surface of concrete, asphalt etc. (or high standard gravel constructed to ensure longevity and reduce wear).
Defined	The pathway can be easily identified within the landscape that it traverses.
Navigable	The pathway can be identified at key points so that users can follow it.

These standards are a minimum and there will be numerous circumstances where the width of path will alter after consideration of local context.

The following table lists the various pathways identified for the Surf Coast Shire.

TABLE 3
Pathway Hierarchy

PATHWAY TYPE	LOCATION Attributes			Intended User
	Township	Rural links	Natural areas	
Regional Pathway <i>(Arterial / Primary)</i>	Wide to Very Wide Smooth Continuous Sealed	Wide Smooth Continuous Formed and drained	Wide Continuous Formed and drained	Walkers Cyclists Motorised wheelchairs Skaters
Pathway Used <i>(See Table 4)</i>	MP	MPG	SPG	
Shared paths <i>(Connection / Secondary)</i>	Wide Smooth Continuous Sealed	Smooth Continuous	Continuous	Walkers Cyclists Wheelchairs
Pathway Used <i>(See table 4)</i>	SP	SPG	NP	
Town Paths <i>(Footpaths)</i>	Smooth Continuous Sealed	Continuous	Continuous	Skaters Walkers Wheelchairs Cyclists (U12)
Path Used <i>(See Table 4)</i>	TP	TPG	TPG	
Equestrian or experiential pathways <i>(Adventure or Nature)</i>	Continuous	Defined	Navigable	Horses Walkers Cyclists
Path used <i>(See table 4)</i>	TPG	NP	NP	
On road Bicycle Routes <i>Specific routes identified as either Local Bike Route or Regional Bike Route</i>	Continuous	Continuous	Continuous	Cyclists

4.2 Network Categories

A network of proposed Pathways and Bicycle Routes has been developed for the Shire. The network includes the following categories:

Regional Pathways: These are pathways of a regional significance that have been identified by other agencies or have a major significance for the Shire in providing primary or arterial connections and links. These pathways will be available for multi-purpose use.

Shared Pathways: These secondary or connector routes have been identified in each of the major towns. They form the major links across towns and to activity centres and facilities. They have been identified as pathways or multi-purpose paths that can be used by pedestrians, cyclists and other users such as roller-bladers and skaters.

Town Pathways: A path network for each major town has been identified building on the existing path network. These paths are suitable for pedestrian use but children under 12 are now permitted to cycle on these paths unless otherwise specified. A minimum width of 1.5 to 1.8 m is recommended to allow for passing and social walking in groups.

Bicycle Routes: These are on road bicycle lanes and routes that have been identified. The type of facility provided on each road will be determined by the available space on the road. Austroads Part 14 (Bicycles) lists several types of on road bicycle treatments that could be used. The details of the type of works that could be undertaken are listed separately in Table 6 (page 12).

4.3 Path Design Details

There has been considerable discussion on the widths of paths to be used in the Surf Coast Shire. Reference was made to AustRoads Guide to Traffic Engineering Practice (Part 13 Pedestrians and Part 14 Cycling), the Shire's Open Space Strategy, the Planning Scheme Clauses 56.07 and 56.04, AS 1428 Design for access and mobility, Auspec-Cycle Way and Pathway Design DM8 and the Surf Coast Shire Subdivision Development Manual.



The following path widths have been determined by the Surf Coast Shire as providing the most affordable paths for the Shire whilst still providing an appropriate pathway for the users.

Table 4
Definition of Types of Pathway Construction

Name	Network Category	Details
Major Path MP	Regional Link	2.0 – 2.2 m or wider, concrete / asphalt
Major Path Gravel MPG	Regional Link	2.0 m gravel surface with crushed rock base
Shared pathway SP	Shared Paths	At least 1.8 to 2.0 m wide concrete / asphalt
Shared Pathway gravel SPG	Shared Paths	At least 1.8 to 2.0 wide with gravel surface and crushed rock base
Pathway natural NP	Pathway in natural areas	Not necessarily constructed but can be followed
Town Path TP	Footpaths within towns for local access.	Minimum 1.5 to 1.8 m wide constructed in concrete / asphalt.
Town Path Gravel TPG	Footpaths within towns for local access.	Minimum 1.5 m wide constructed in gravel
Town Path Commercial area	Paths that pass through commercial areas will have different widths for needs relating to the commercial activity eg sidewalk cafes etc	There should be at least a minimum 1.8 to 2.0 m wide clear thoroughfare in these areas. This is to be a continuous line of travel from the building line (plus additional 700 mm overhang for vehicles and trading zone allowance where applicable). The clearance envelope should also be at least 2.5 m high with nothing encroaching into that envelope.

5. Access for All

The Pathways Strategy has been developed using the principals outlined in the Surf Coast Shire's Access and Inclusion Plan. The Pathway Strategy also has a policy statement directly developed for Access for All. The Surf Coast Shire is committed to providing services and facilities that meet the needs of the whole community. The Surf Coast Shire has a committee that provides advice in relation to disability issues. This committee is called the Advisory Committee on Disability (ACoD). A number of members of this committee were actively involved in the consultation process for the Pathways Strategy.

By providing pathways that meet Access for All standards the whole community benefits. The following issues were raised in the consultation process in relation to access. The Surf Coast Shire will endeavor to:

- ◆ Develop new pathways that are accessible to all abilities.
- ◆ Allow people to travel continuously on pathways.
- ◆ Meet the standards as outlined in sections 3.1, 3.2, 3.3 and 3.4 of this strategy.
- ◆ Work in partnership with other agencies and land developers to ensure the policies in this strategy are implemented.
- ◆ Ensure that encroachment does not occur on Surf Coast Shire owned or managed land that impedes access and future pathway development (e.g. Vegetation on nature strips and claims of adverse possession).
- ◆ Support other agencies to ensure that encroachment does not occur on their owned or managed land that may impede access and the future development of pathways.
- ◆ Implement the outcomes of the Surf Coast Shire Street Furniture Policy and Footpath Trading Policy.
- ◆ Provide multi-use pathways wherever possible.



6. Priority of Works

6.1 Criteria to be used

The cost of the new path works will be substantial and will be constructed over many years. A system of prioritizing the works has been developed to identify priority projects for inclusion in a 10 Year Pathway Work Program. The total 10 Year Program is shown in Tables 9 to 19 of Part B of this report. The complete Pathways Works Program is filed separately; staff can view it at D11/55102, or by contacting the Manager Engineering Services on 5261 0600.

The following criteria list is for use for new sections and complete upgrade sections of pathway. The priority for repair and maintenance of existing sections of path should be determined by other systems related to the life expectancy and serviceability of the paths.

1	Strategic importance / Transport Linkages <i>Considerations include links to existing pathways, links to key services and public transport.</i>	40%
2	Usage / Need <i>Considerations include proximity of primary destinations, evidence of use.</i>	20%
3	Safety / Environmental <i>Consideration – does it reduce conflict between path users and road traffic? What is sight distance like? Will consideration reduce impact on the environment?</i>	20%
4	Community Desire <i>Is there strong community desire?</i>	20%



6.2 Priority setting process

Each section of proposed trail has been considered for each of the above criteria.

To aid the process, the paths were identified according to their category as either regional, shared path, town path or as a bicycle route.

Regional Pathways are more likely to be identified in the Council Plan and Master Plans and have a greater ability to attract external funding than Shared Paths and Town Paths. For these reasons these regional paths will generally always have a higher priority number than other categories of paths.

Shared Paths and Town Paths are more likely to have community involvement in path planning and in construction because of the local benefit. The community consultation process used during development of this Strategy identified a number of community priorities and these have been given considerable weighting.

Communities can increase the priority for paths in their areas by becoming involved in the planning and construction of the pathway.

The pathway priorities will be reviewed annually. The review process will involve consideration of all pathways works undertaken during the year and any feedback on pathways from community consultation and resident feedback which may change some of the priority factors and the types of pathways constructed.



7. Costing of Works

The indicative cost for the different types of works has been identified in the following Table 5.

These costs are based on the figures prepared by the Surf Coast Shire. The costs reflect the greater travel distances and higher material and construction costs applicable to more remote areas.

These costs were applied to each of the sections of proposed and upgraded paths according to the type of path to be used.

Regional Paths have the highest standard of construction and therefore are the most expensive. These paths also have the most likelihood of attracting external funding.

Shared Paths are key elements in the township path network, they are used by a wide range of users and have a high standard of construction.

Town Paths are not as critical in the network and serve a smaller range of users.

Town Paths in places such as Torquay, Jan Juc, Anglesea and Winchelsea that are likely to cater for larger numbers and are located in more urban settings, have been identified as town paths with a sealed surface. Sealed Town paths have also been recommended in Lorne because of its very steep slopes where gravel could be dangerous.

Other less urbanized towns such as Aireys Inlet and Moriac have been identified with gravel town paths. Each pathway regardless of location should be individually considered on its own merits during the detailed design stage. Pathways need to be designed to meet the individual needs of the path reflecting such things as use, users, location, setting and environmental considerations.

TABLE 5
Table of Pathway Costs

Name	Indicative cost per lineal metre 2010/2011
Major Path MP	\$255 / m plain concrete
Major Path Gravel MPG	\$90 / m
Shared pathway SP	\$240 / m
Shared Pathway gravel SPG	\$70 / m
Pathway natural NP	\$1 / m for signs
Town Path TP	\$220 / m
Town Path Commercial area	-
Town Path Gravel TPG	\$55 / m

*Note: These are average path construction costs applicable to rural areas.
It is expected that there will be variations depending on the accessibility of the area.*

8. Forward Budgets

The Pathway Strategy identifies just over \$37 million dollars of Pathway works, of which approximately \$20 million are under the responsibility of the Surf Coast Shire (including developers). It was therefore important to prioritise these pathways so that a realistic 10 Year Shire Priority Works Program could be developed.

A proposed budget was developed which recommends that the future budgets to be allocated by the Surf Coast Shire \$650,000 per annum for each year. In addition to this funding, the program includes a \$124,000 per annum contribution from external funds (external grants, special charges schemes*). This provides a total budget allocation over 10 years of \$7.74 million with council contributing \$6.5 million.

Where a proposed priority pathway is indicated as the responsibility of another agency, the Surf Coast Shire would act as an advocate on behalf of the community for the provision of a priority pathway or in some cases may consider part funding pathways of community significance. There will also be occasions where recommended pathway routes will be realigned or revised when further detailed consultation and investigation is undertaken with other land managers.

The following table refers to Surf Coast Shire funds and the proposed distribution of these funds based on the anticipated Shire funding levels over ten years:

Pathway Category	Annual Budget (Year 1-10)	
Regional Pathways	\$100,000	Shire Allocation
	\$50,000	External Funds
Shared Pathways	\$340,000	Shire Allocation
	\$34,000	External Funds
Town Pathways	\$200,000	Shire Allocation
	\$40,000	External Funds
Bicycle Routes	\$10,000	Shire Allocation
Surf Coast Shire Contribution	\$650,000 per annum	
External Funds	\$124,000 per annum	
TOTAL BUDGET	\$774,000 per annum	

Note: It is expected that these budget allocations will increase in line with CPI increases

**It is Council policy to collect a special rate or charge (in line with the Local Government Act) from property owners who receive special benefit from necessary infrastructure improvements. A determination is made of the "special benefit" that the owner contributes, and Council contributes to the wider "community benefit".*

Whole of Life Costs

The estimated budgets refer to the initial capital expenditure required and do not reflect the "whole of life" costs associated with the implementation of the proposed works.

The 10 Year program proposed for implementation by the Shire includes sealed or concrete pathways and gravel pathways. The annual costs of maintaining concrete or sealed paths is nominal - less than 1% - to cover the repair of isolated damage.

The annual cost of gravel paths is higher. If a resheet is allowed for every 10 years (similar to the current gravel road program) and regrading every 3 years, it is estimated that the annual operating cost is in the order of 6% of the capital investment. Funds for the provision of this operating cost will need to be taken into consideration progressively from year 2.

9. Bicycle Routes

This strategy is primarily focused on the off road paths and trails in the Shire that can be used by walkers and cyclists. However the needs of cyclists can also be accommodated by using on road routes.

9.1 Bicycle Facilities

The standards to be used for Principal and Local bicycle on road facilities are based on Austroads Guide to Traffic Engineering Practice Part 14 Bicycles, 1999 and the relevant section of this guide is identified in Table 10. Only the most likely standards have been identified in this report and Austroads Part 14 should be referred to in all other situations. The need for these facilities applies to roads with greater than 3000 Vehicles per day (VPD).



TABLE 6
Types of On Road Bicycle facilities

Type of On Road Bicycle Treatment	Cost
Exclusive Bicycle Lanes (EBL) The preferred treatment for cyclists. Motor travel and parking is not permitted. A width in range of 1.2 m to 2.5 m with the desirable width of 1.5m .	Cost \$10,500 per kilometre for construction of additional road surface of 1.5m
Bicycle and Parking Lane (BPL) Provides improved condition for cyclists and includes allowance for door opening. For use on low speed roads with a range of lane widths from absolute minimum of 3.7 m to 4.5 m with 4.0m being desirable	Cost \$6,500 per kilometre
Advisory Edge Treatments	
Line and Symbol Treatment (ETL) Consists of lines and symbols marked on roadway. Used where space cannot be obtained by other means and advises road users that cyclists use the road. Requires a minimum of 3.0 m lane to allow for 1.2 m space for cyclist and parking.	\$1000 per km per line and \$140 per Bicycle symbol. There will be four lines required and at least six symbols. A cost of \$5000 per kilometer
Symbol only treatment ETS Consists of symbol on road near kerb with accompanying sign. Can be used in conjunction with Wide Kerb side Lanes (WKSL)	Cost \$2,500 per kilometer
Signs SNS Signs such as "Caution Cyclist" signs and similar signs can be used to identify existing roads and routes which can be used by cyclists.	Signs have been costed at \$750 per kilometre.

*Note: 1. Many of the roads in some towns have a very narrow seal and there is no sealed provision for cyclists. The cost of sealing would be beyond available funds. In these cases the use of signs would be required.
2. Shoulder sealing is recommended for particular sections of road. However, in nearly all cases the work would be undertaken as part of the road works to upgrade the road surface or to widen the road for road safety purposes and should not be considered as a bicycle only cost.*

9.2 Priority and local routes

VicRoads funding guidelines identify Priority Routes (Regional Bike Routes and Local Bike Routes) that will provide the arterial network for cycling within towns and which will receive priority funding. There is also a need for local routes within towns.

9.3 Regional Bicycle Routes

The Great Ocean Road, Surf Coast Highway, Anglesea Road, Winchelsea-Deans Marsh Road, Lorne-Deans Marsh Road, Cape Otway Road and the Princes Highway are the major roads connecting most of the towns within the Shire.

9.3.1 Great Ocean Road

The Great Ocean Road has been identified as a major bicycle route and a plan for a trail, mostly along the road shoulders, has been prepared by the Barwon Region Bicycle Council for further development. VicRoads has been progressively improving the shoulders on this road.

As the Great Ocean Road passes through most of the major towns in the Shire many of the priority routes for bicycles are located on this road.

9.3.2 Cape Otway Road

Cape Otway Road has been identified as a bicycle route providing a connection to Colac and the SouthWest. This road route has been identified because of the heavy traffic on the Princes Highway.

9.4 Touring Training Routes

The Shire has already identified 30 different bicycle touring rides covering 855 kms of cycle touring routes and these have been promoted through a map brochure. The Surf Coast Shire is also a popular destination for road training and racing.

9.5 Local Bicycle Routes

On road bicycle routes within the major townships in the Shire have been identified. A major factor in locating the routes is to provide bicycle access to destinations such as schools and other facilities.

9.6 Bicycle Parking Facilities

The installation of bicycle parking facilities at key destinations in all towns is required to reduce the dependence on vehicles and reduce the congestion in carparks. The location of rails will be determined in consultation with traders and local cyclists.

10. Funding Sources

There are numerous funding sources available for path works. The major source will be Surf Coast Shire through the Capital Works Program or through Special Charge Schemes that require a contribution from owners of property that benefit as a result of the works.

Path works in new developments should be funded by the property developers as part of their marketing of the properties as “walkable” and liveable communities and through developer contributions. Developers should also adhere to the policies outlined in this strategy.

Funding is also available from several Government agencies and other sources.

Possible funding sources include:

- ◆ VicRoads
- ◆ Department of Sustainability and Environment
- ◆ Great Ocean Road Coast Committee
- ◆ Parks Victoria
- ◆ Community and other State Grants
- ◆ Commonwealth Grants
- ◆ Sport and Recreation Victoria
- ◆ Business Victoria
- ◆ Catchment Management Authority
- ◆ Communities and Service Clubs
- ◆ Private sponsorship and advertising

11. Recommendations

The following Recommendations are made to facilitate the implementation of the Pathways Strategy.

1. Pathways identified in this revised strategy be adopted by the Surf Coast Shire as a key component of the Shire’s infrastructure and included in future development activities.
2. That the Surf Coast Shire Pathways Policy outlined in this strategy be adopted by Council and used for the planning, development and implementation of future pathways.
3. The concept of Walkability and Walkable Communities be adopted as a guiding principle in future planning.
4. The priority setting process be adopted as a means of determining priorities over the range of pathways proposed.
5. That pathways to be constructed by developers be consistent with Surf Coast Shire Subdivision Design Guidelines.
6. The following recommendations on capital expenditure funding of future projects be endorsed in principle and reviewed annually.

Pathway Category	Annual Budget (Year 1-10)	
	Regional Pathways	\$100,000
	\$50,000	External Funds
Shared Pathways	\$340,000	Shire Allocation
	\$34,000	External Funds
Town Pathways	\$200,000	Shire Allocation
	\$40,000	External Funds
Bicycle Routes	\$10,000	Shire Allocation
Surf Coast Shire Contribution		\$650,000 per annum
External Funds		\$124,000 per annum
TOTAL BUDGET		\$774,000 per annum

Note: It is expected that these budget allocations will increase in line with CPI increases

7. Existing pathways forming part of the Regional, Shared Pathway and Town Path network be included in an annual maintenance program and sufficient funds be allocated to maintain the pathways to the adopted standard.
8. The recommended continuing review of priorities be adopted to ensure future funding and works conform with changing community expectations.
9. That the integrated planning approach through the Pathways Group be maintained so as to annually review and regularly update this Pathways Strategy.

12. Works Program

This is a strategic document and therefore the works program is broad. In the Program of Works, individual sections of paths have been identified and considered using a “typical treatment” according to the category and standard to be adopted. *The Program of Works and the associated township plans are located in Part B of this Strategy.*

The final design treatments may need to be modified to meet specific needs at each location and this could have a significant impact on the final costs. Many paths will require further investigation and design regarding environmental, heritage and technical issues.

The 10 Year Works Program identifies the total cost for the Surf Coast Shire works as \$7.79 million with Council contributing \$6.5 million over a ten year period. All pathway works within the ten year works program will be reviewed by the Pathways Group and other relevant stakeholders, prior to and during the detailed design stage.

TABLE 7
Completed Works

Town	Actual Cost of Paths	Number of Paths
Aireys Inlet	\$110,292	9
Anglesea	\$345,096	11
Bellbrae	\$132,057	3
Bells Beach	\$208,980	5
Deans Marsh	\$54,592	1
Lorne	\$329,842	8
Moriac	\$287,264	3
Torquay	\$2,493,025	62
Winchelsea	\$218,767	8
TOTAL	\$4,179,915	110

TABLE 8
Summary pathways and estimated costs in each Township for the 10 Year Capital Works Program

Town	Estimated Cost	Number of Paths
Aireys Inlet	3,595,180	86
Anglesea	4,683,415	58
Bellbrae	1,249,260	13
Bells Beach	531,675	13
Connewarre	27,610	1
Deans Marsh	1,053,740	7
Lorne	2,826,523	35
Moriac	2,856,669	16
Torquay / Jan Juc	15,786,520	137
Winchelsea	4,501,016	51
TOTAL	\$37,111,608	417

13. References

1. Surf Coast Shire Open Space Strategy (*Robin Crocker and Associates 2004*)
2. Surf Coast Shire Community Plan
3. Surf Coast Shire Road Safety Strategy
4. Surf Coast Shire Accessibility Strategy
5. AIDA (Aireys Inlet) Pathways Report
6. Aireys Inlet Neighbourhood Character Study
7. Surf Coast Shire Torquay North Concept Outline Development Plan Update (*Tract Consultants Pty Ltd. July 2003*)
8. Torquay Foreshore Master Plan and Management Plan (*Thompson Berrill Landscape Design PL*)
9. Bob Pettitt Reserve Master Plan (*Gary Henshall and Associates Pty Ltd*)
10. Deep Creek Landscape Master Plan (*Contour Design Australia Pty Ltd*)
11. Lorne Coastal Action Plan (*Western Coast Regional Coastal Board*)
12. Aireys Inlet Reserve Master Plan (*Thompson Berrill Landscape Design PL*)
13. Winchelsea Riverside Reserve Master Plan (*Thompson Berrill Landscape Design PL*)
14. Spring Creek Reserve Master Plan (*Aspect Melbourne Pty Ltd*)
15. Coogoorah Park Landscape Master Plan (*Thompson Berrill Landscape Design PL*)
16. Bells Beach and Winki Pop Master Plan (*Thompson Berrill Landscape Design PL*)
17. Lorne Town and Street Scape Project (*Thompson Berrill Landscape Design PL*)
18. Allen Noble Sanctuary Landscape Concept Plan (*Murphy Design Group*)
19. Victoria for Bikes Cycling Strategies for Victoria, prepared by Parklinks Pty. Ltd. for State Bicycle Committee, Oct 94
20. AUSTRROADS Guide to Traffic Engineering Part 14 Bicycles
21. Sign-up for the Bike, Design Manual for a Cycle-friendly Infrastructure, Centre for Research and Contracts 17.4 in Civil and Traffic Engineering, The Netherlands 1993,
22. Australian Standard AS 2890.3 1993 Parking Facilities Part 3 Bicycle Parking Facilities.
23. AUSTRROADS Guide to Traffic Engineering Part 13 Pedestrians
24. It Can Be Done: A Bicycle Network on Arterial Roads completing Melbourne's Principal Bicycle Network prepared by Bicycle Victoria 1996.
25. Australia Cycling , The National Strategy 1999 - 2004, AUSTRROADS
26. Barwon Region Bicycle Strategy, Parklinks Pty Ltd. 1995
27. Great Ocean Road Trail Study, Sinclair Knight Mertz, 1997 for Barwon Region Bicycle Council