Selwyn DISTRICT COUNCIL

Walking and Cycling

Action Plan

June 2018

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1. Action Plan

This Walking and Cycling Action Plan (Action Plan) has been developed to accompany the Selwyn Council's Walking and Cycling Strategy (Strategy) to give effect to the broader outcomes and goals it has identified. It provides detailed information on what needs to be done to achieve this including a list of walking and cycling projects and activities we have identified, what funding is required and what is programmed to occur over the next decade and beyond. It also details the technical and planning aspects needing to be considered when undertaking all of this.

The Action Plan will be updated every three years so it can inform Selwyn Council's Long Term Plan (LTP) process. Projects and activities can also be amended or added to as part of the intervening Annual Plan Submission process.

Figure 1 — Construction of the Springston to Lincoln Cycleway

This Action Plan discusses the 5 main areas that contribute to delivering fit for purpose walking and cycling projects and activities in line with Selwyn Council's outcome for:

A Selwyn where more people walk and cycle safely for transportation and enjoyment

These areas cover:

- Connectivity and Audience;
- Engineering and other Key Methods;
- Facility Type and Levels of Service (LOS);
- Design Guidelines;
- Project Indentifcation and Priortisation;
- Funding.

2. Connectivity and Audience

The following factors are among those that should be considered when deciding where to provide walking and cycling facilities:

2.1 Network connectivity

This is concerned with ensuring pedestrians and cyclists can travel between key locations such as:

- Residential areas;
- Business areas;
- Commercial centres;
- Educational facilities;
- Sports facilities;
- Recreational journeys and destinations.

The type of walking and cycling facilities that achieve this is detailed further in Section 4 that include:

- Standard township footpaths;
- Shared use connecting paths;
- Recreational rural paths and tracks;
- On road cycle facilities;
- Crossing facilities and intersection treatments.

2.2 Desire lines of pedestrians and cyclists

"Desire lines" are the specific route trajectories pedestrians and cyclists would prefer to follow when travelling from a specific origin to a specific destination. Directness is generally the key factor in route choice and should be favoured in network planning. For recreational trips, other elements such as the attractiveness of the surrounding environment may also be important and has factored significantly in the development of the Rail Trail south of Lincoln.

2.3 Network permeability

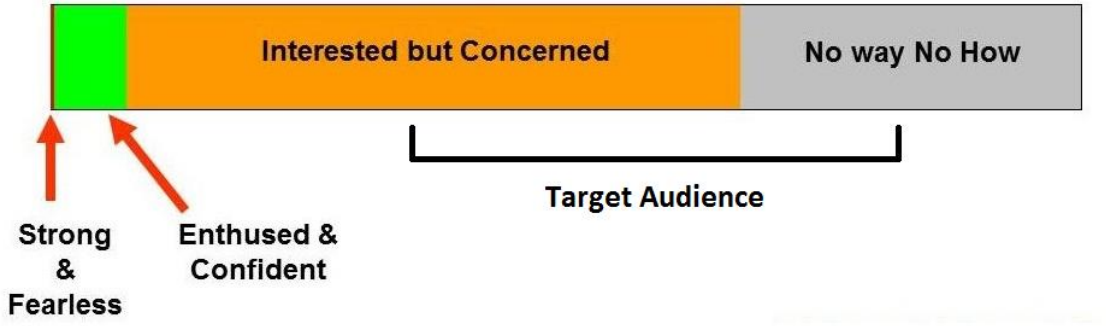
Walking and cycling trip lengths can be reduced by providing "short-cuts" in places where the road network does not provide this. This can be done by providing links passing through reserves, between adjacent cul-de-sacs or areas for pedestrians and cyclists only. This can increase the desirability and efficiency of walking and cycling by giving an advantage in comparison to motorists. Well-designed parks and reserves that follow the Crime Prevention through Engineering Design (CPTED) principles are key in giving people safe and efficient routes and linkages they can use on a daily basis.

2.4 Target Audience

It is important to consider the users that the network and facilities are to be designed for. The level of provision of a particular route should meet the needs of the target audience over its whole length, including at critical points such as crossings and intersections. Different routes within a network may be designed for different target audiences.

The most commonly used target audience framework was developed by Geller (2009), who divides the total population of a place into four groups. Figure 2 shows these four target audience groups according their relative proportions.

Figure 2 – Four types of transportation cyclists



The four groups shown in Figure 2 can be explained as follows:

- **Strong & Fearless**: people who cycle regardless of the road or traffic conditions.
- **Enthused & Confident:** those who are prepared to cycle when provided with some space on the carriageway, either formally (for example by painted cycle lanes) or informally (for example by wide kerbside lanes). People in this group may be prepared to mix with motorised traffic to some extent.
- **Interested but Concerned:** those who require physical separation from motorised traffic before they are prepared to travel by bicycle. People in this group may only be prepared to mix with motorised traffic where both volumes and speeds are low. This group often includes children, where their parents' attitudes regarding facility provision is the critical factor.
- **No way No how:** This is the remainder of the population that would not use a bicycle regardless of the quality of the cycle network.

Generally most gains can be obtained in catering for those "Interested but Concerned" within the road network. What is important to those "Interested but Concerned" is separation from traffic; travel speed is often a secondary consideration. One of the challenges is to ensure that infrastructure for the "Interested but Concerned" also meets the needs of the "Enthused & Confident" cyclists, for who generally value directness and minimal travel over separation from traffic. Sometimes separate facilities may be provided on parallel routes to provide for the needs of these users.

However the Strategy also seeks to change the "No Way No How" group's attitude by providing safe and convenient cycling facilities that can encourage them to consider "giving it a go". This may be as simple as providing an off road cycleway near where they live to increase their confidence to travel or explore further.

While this target group audience has been considered in view of designing and providing for cyclists, similar considerations could be made when designing safe and accessible pedestrian networks.

2.5 Township Network Plans

Township network plans have been provided for each of the District's townships. These maps show existing and proposed footpaths/shared paths within each respective townships. The preparation of these maps, where possible have been informed by the respective township committee or resident association. These maps and the list of corresponding walking and cycling projects can be found in Section 5 and Appendix C.

2.6 District Network Plans

Plans showing how existing and proposed cycling links between townships and key destinations are being planned can be found in Appendix C These fall into three broad categories as follows for:

1. **Transport and Commuter** use e.g. The Rail Trail between Prebbleton and Lincoln, the Rolleston to Lincoln Cycleway etc. Sealed pathways.

2. **Recreational** use e.g. the Rail Trail south of Lincoln to Motukara and beyond. Unsealed pathways.

3. **Tourism** use e.g. proposed Mountains to Sea Cycleway or long sections of cycleways beyond what residents would use as part of a national cycling network. On road and a mixture of pathways.

Obviously there will be combined use between the various categories however Selwyn Council's main role from a planning and funding perspective is in the first two categories for the immediate benefit of its residents and visitors to Selwyn.

3. Engineering and Other Key Methods

Fit for purpose engineering and infrastructure works are the prime method to provide safe and accessible walking and cycling networks, but they are not the only methods. This Action Plan reflects other methods such as education, encouragement, promotion and traffic enforcement as complementary ways of achieving the Strategy's goals.

3.1 Engineering and Planning

- *Guiding Principles*

The development and maintenance of walking and cycling infrastructure will be based on the following principles:

- Designing for walking and cycling is not to be secondary to that needed for motor vehicles and are to be treated as complementary during the design processes. This also includes any public transport infrastructure as this can be an integral part of a walking and cycling journey to access such services.

- Walking and cycling will be considered at every level of planning and engineering processes and take account of relevant national guidelines and best practice methods. Provision of walking and cycling facilities or services following this consideration is to be subject to Selwyn Council's normal consideration of appropriateness, affordability, practicality and design constraints.

- Appropriate land use planning that facilitates ease of travelling by cycle or on foot, as sustainable modes of transport.

- Recognition that education, traffic enforcement and encouragement are as important as constructing walking and cycling facilities.

- Encouragement of appropriate planning for walking and cycling, including provision of improved connectivity within and between new developments and subdivisions, and between them and established residential areas and facilities.

- A range of traffic management measures appropriate to the environment and needs shall be considered for implementation. These may include traffic reduction, speed limit enforcement, driver education, reallocation of road-reserve space, and the upgrading and expansion of facilities.

- Walking and cycling networks in all areas, including reserves will follow Crime Prevention Through Environmental Design (CPTED) principles and guidelines; where deficient they will be improved progressively, and provided with linkages to both rural and urban areas.

- Selwyn Council, its staff and consultants will promote and strive to provide safe and efficient road, footpath and cycle networks that will provide for the diverse needs of people. This includes those who choose to walk, cycle or drive and these local networks at are appropriately integrated with facilities and services like public transport.

- Recognition that motor traffic modifies pedestrian and cyclist behaviour, and vice-versa. This is becoming more relevant in our townships that have higher density developments, where road space is becoming more constrained and requires all roads users to respect each other rights to use these spaces safely.

- The roading infrastructure around and near schools is to be designed to encourage safe walking and cycling as means of transport to and from school through the control of vehicle speeds, parking behaviour and providing pedestrian crossing points such as supervised "Kea Crossings" that can be run by the schools.

- *Engineering Standards*

The principal standards applicable to the development of pedestrian and cycle facilities throughout the District are detailed further in Section 4, including how the main LOS were determined by Selwyn Council. Where appropriate these technical aspects will also be cross referenced in Selwyn Council's Engineering Code of Practice.

3.2 Education, Encouragement and Promotion

Improving peoples' attitudes and behaviour towards walking and cycling is key in unlocking more walking and cycling in the District for transportation and recreation. This long-term change involves a number of components:

- Raising awareness of the benefits of walking and cycling is the first stage of the programme and key to the success of all the other stages.

- Behaviour change programmes for people to consider walking and cycling as a means of transport, particularly for short trips.

- Behaviour change that engenders mutual respect and consideration between cyclists, pedestrians, public transport users and motorists recognising that they are all part of the same transport system.

- Encouraging walking and cycling as means of transport to and from schools or for a part of these journeys.

Figure 3 – Rolleston to Lincoln Cycleway

3.3 Traffic Enforcement

Traffic enforcement is an important component as it supports the initiatives taken in the other areas such as education, encouragement, promotion and engineering. Poor behaviour around car parking e.g. on footpaths and cycleways and inappropriate vehicles speeds can hinder or jeopardize the safety and passage of pedestrians and cyclists in our townships and around schools etc.

For example, the use of e-bikes and e-scooters on footpaths and cycleways is becoming more common. In general, Selwyn Council is supportive of these new technologies in making walking and cycling easier for all age groups. However the speed differential between the electric vehicles and pedestrians means that some form of enforcement may be necessary to mitigate unsafe situations.

These situations will be monitored and any response required in the policy and bylaw context will be progressed into an Action Plan. Selwyn Council's response will be informed by guidance from the wider sector.

With the recent high growth in some of our townships like Rolleston and Lincoln, car parking demands have significantly increased. Selwyn Council is addressing parking infringements by employing Compliance Officers. Their authority is underpinned by the Traffic and Parking Bylaw which will provides the legal basis to any infringement actions deemed undesirable by Selwyn Council.

Selwyn Council also carries out regular speed limit reviews across the District. A key focus is on the sections of previously rural roads on the perimeter of our expanding townships that are now having to be transformed into urban roads and making sure a corresponding reduction in vehicle speeds occurs. This is in conjunction with the new subdivision developments and the introduction of new footpaths and cycleways alongside these roads. Changes in speed limits are implemented through Selwyn Council's Speed Limit Bylaw which are then enforced by the Police.

Selwyn Council continues to have excellent working relationships with the Police through its Road Safety Subcommittee.

4. Facility Type and Levels of Service

Once the local network has been established and the locations for walking and cycling facilities have been identified, the type of facility to be chosen depends on who and how it will be predominately used, and the facility's location with respect to the surrounding land use and road network. A strategic decision may be made to provide a higher grade facility at a certain location to promote higher usage including the "build it and they will come" approach.

Different facility types can be used to provide for walking and cycling routes and are summarised in Table 1 below. The engineering design requirements for the various facility types are presented in Section 7.

4.1 Level of Service Determination

In 2014, Selwyn Council engaged Frame Group Limited, a specialist walking and cycling consultancy, to independently assess what the appropriate LOS should be on the longer links within the District and corresponding cycleway construction options for these links. The motivation for the report was Selwyn Council's concern that faced with a large forward programme of between-township cycleways, it would be unable to provide the typical 2.5 metre wide sealed cycleway in all circumstances because of funding and environmental design constraints.

Environmental design constraints included power poles, open drains and water races alongside the carriageway that tended to restrict the legal road width available for a 2.5m shared path. Given rural cycleways tend to be long and straight, it was considered appropriate that pedestrians and cyclists on a narrower path would have sufficient time to react to an approaching cyclist and take the appropriate course of action to avoid them.

Another point of debate was whether rural cycleways should be sealed. The preference of a sealed surface compared to an unsealed aggregate surface reflected the fact that the majority of cyclists using these links would be commuter type cyclists who require an all-weather sealed path in addition to a multitude of other users like pedestrians, children, mobility scooters etc.

Additionally, maintaining a sealed path in the long term would be more cost effective than an unsealed path in higher use situations. Another concern is that cyclist may continue to use the road instead in lieu of an unsealed off road path because the road will have a perceived higher LOS.

In response to these points, the Frame Group Report made the following supporting LOS recommendations which were approved by Selwyn Council. The recommendations included:

- *Consideration should be given to initially constructing some between-township links to a reduced width of 1.5m whilst preserving the option for future widening to 2.5m;*
- *New off road cycle paths between the District's townships should be constructed with hardened surfacing rather than unsealed aggregate surfacing;*
- *Asphaltic Concrete should be the preferred surfacing for commuter link cycle paths because it offers the lowest total cost surfacing that has an acceptable LOS.*

In simple terms off road cycle paths are now generally provided as follows:

In urban areas; 2.5m wide shared use sealed pathway
In rural areas; 1.5m wide shared use pathway between townships having a mixed range of users and purposes ***or*** 1.5m wide and unsealed rural pathway for recreational only e.g. used by "mountain" bikers where this type of reduced level of service is required for recreational and adventure purposes

Table 1: Properties of walking and cycling facilities

Facility	Mode Provision	Predominant trip purposes	Urban / Rural (predominant)	Location with respect to road	Surface type
Township Footpath	Walking	Transport and recreation	Urban	Adjacent[2]	Sealed
Shared Use Path	Walking and cycling	Transport and recreation	Urban and Rural	Adjacent or separate	Sealed
On-road cycle facilities	Cycling	Transport and recreation	Urban and Rural	On carriageway /shoulder	Sealed
Recreational Rural path	Walking and cycling	Recreation	Rural	Adjacent or separate	Sealed or Aggregate[3]
Rail trail	Walking and cycling	Recreation	Rural	Adjacent or separate	Sealed or aggregate
Walking Track	Walking	Recreation	Rural	Separate	Natural or aggregate

Notes:

1. This table does not include crossing and intersection facilities, which are critical components to any walking and cycling route facility and must be considered based on the facility's interaction with the road network, as discussed further on in Section 7.
2. If a path is to be provided separate from the road corridor in the urban context, a shared path should be provided so that network permeability and connectivity is improved for cyclists as well as pedestrians.
3. Unsealed aggregate surfaces are the likely surfacing expected to be used for practicality and affordability.

4.2 Standard Township Footpaths

Standard footpaths are those sealed paths around 1.5m wide found along the roads and streets throughout townships and cities. Footpaths provide safe, convenient, easily negotiated access to and from residential properties, recreational facilities, business and commercial areas of towns.

Selwyn Council wants to ensure that there will be at least one footpath along the side of an urban street or road, or on both sides on busier roads to improve safety by reducing the need for pedestrians to cross the road to use a footpath. These paths may be either the standard width of 1.5m or wider where there are more pedestrians, shops and activities that warrant the need to accommodate more people.

All new and reconstructed footpaths will meet national accessibility standards wherever possible. Careful attention will be given to providing crossing points that are correctly positioned and configured to cater for expected use. Reviews of the District Plan and the Engineering Code of Practice allow the opportunity to review standards in line with other national sources such as Austroads and NZS 4404 2010 Land Development and Subdivision Infrastructure.

The Township Network Plans showing Councils network of Footpaths are in Appendix C.

4.3 Shared Use Connecting Paths

In some situations it is considered effective and economic to provide sections of short or long paths that can be shared by both cyclists, pedestrians and other users both within townships and between them. This allows cyclists to be separated from the road which can increase safety (provided that conflict points such as intersections and driveways are also well designed) and encourage use by a broader group of cyclists. Figure 4 shows the shared path running along the perimeter of the Rolleston Industrial Zone.

Within-townships cycleways can be used to describe those shared pathways that provide connections within townships while between-township cycleways are those that link townships together across rural areas.

Shared paths can be used for both transport and recreational purposes and may connect all varieties of transport origin and destination locations. Shared paths normally occur next to the carriageway within the legal road reserve or through public reserves and domains to increase network permeability and connectivity for pedestrians and cyclists.

Pedestrians and cyclists are two distinct user groups with different travel characteristics, especially in terms of travel speed. Shared paths can provide greater widths than the standard 1.5m wide footpaths and are typically up to 2.5m wide in urban areas, although they revert to 1.5m wide as explained in Section 4.1. A good example of an urban shared path is along Lowes Rd in Rolleston.

Figure 4: Shared Path (Izone)

Appropriate signage at the start and end of the shared path is required to legalise the shared path. Additional signage is required if a roadway/pathway intersects the shared path.

During the writing of this Action Plan, the Road Controlling Authorities (RCA) Forums "Shared Footpath Working Group" has recommended a rule change to the Government to:

- *Allow cycling on the footpath by children up to and including 12 years of age or year 8 (and accompanying adults), seniors over 65, and vulnerable users (such as those with mental or physical disabilities);*
- *Make bells mandatory for any bicycle used on footpaths or shared use paths;*
- *Allow local authorities to exclude, on a reasonable basis, certain areas of footpath from being used for cycling.*

Selwyn Council will keep appraised of the abovementioned developments and ensure safe implementation of any changes to rules that govern cycling on footpaths. This includes appraising the suitability of shared path widths.

4.4 Recreational Rural Paths and Tracks

Rural paths and tracks are those that have a more recreational purpose where there is a scenic outlook or a connection to a destination that involves travelling longer distances in the countryside with a corresponding appreciation there will be a lower LOS compared to urban paths:

- Likely to be unsealed and have an aggregate surface;
- Not a fully integral part of a urban or wider walking and cycling network;
- In some situations have a suitably maintained natural surface, for example mowing the grass to create a "path", can be created alongside a road. This may be an option for certain times of the year to access a camping ground remote from a township. This option is not the default choice for path provision;
- Multi-purpose i.e. walking and biking but not really for equestrian use

It is noted that the wider regional based tourist cycleways are considered beyond the scope of what this Action Plan caters for and that Selwyn Council is responsible for. Such facilities are promoted more through national tourism, economic and provincial development initiatives as covered by the New Zealand Cycle Trail (Great Rides) and related organisations.

4.4.1 Rail Trail Paths

"Rail Trails" are cycleways used for recreation and tourism and follow old rail corridor alignments where the remnants of the old rail line ballast already provide a reasonable surfacing that is able to used. Where these deviate from the original rail alignments, separate paths are constructed alongside roads and across private land.

The Christchurch to Little River Rail Trail is a relatively unique example combining different types and uses of pathways. Between Hornby, Prebbleton and Lincoln it serves as a link for transport and commuting purposes and correspondingly it is classified as a shared connecting path with a 2.5m wide sealed surface. In the more remote areas south of Lincoln it reverts to a recreational rural path using a 1.5m wide unsealed aggregate path with some limited on-road sections on quieter rural roads. Figure 5 shows a section of the Rail Trail South of Lincoln.

It is sometimes convenient to consider utilising active rail corridors to position a cycleway alongside for longer recreational and tourist cycling connections considering these corridors traverse the country. However these corridors are under the control of KiwiRail and permission to use them is required including any conditions they may impose such as safety features and application of annual fees.

Figure 5: Little River Rail Trail

4.4.2 Walking Tracks

These are off-carriageway tracks that are predominantly used for walking-related leisure or exercise activities including running and hiking. These may use legal unformed "paper" roads as explained in Section 4.8. These tracks maybe quite informal and can cater for a mixed use. Note that the track specifications given in Table are for walking only tracks.

They are often located where natural features occur and often with scenic opportunities, such as stream, lake or mountain views. Alternatively, they may form part of a link between non-council trails, tourist links and other facilities, such as the Mingha Valley to Arthur's Pass Village path.

These recreational tracks, for walking-related activities, have the following characteristics:

- Will be mostly separate from roads;
- Will have either an aggregate or natural surface;
- Can be long and may extend outside an individual District;
- May require other facilities such as toilets, carparks and picnic tables;
- May provide for dual use but will not normally do so;
- Increased width or visibility requirements if cyclists are allowed to share the track;
- Dogs may be prohibited if the trail crosses private property conservation land;
- May be some periodic limits on access due to farming activities, e.g. lambing;
- May utilise unformed legal roads as explained in Section 4.10;
- Managed by the Department of Conservation or Environment Canterbury if crossing their land.

4.4.3 Possible Future Initiatives

Council can receive many requests to develop recreational tracks and pathways. These are from either individuals or groups that wish to access rural, hill and high country areas and along lakes, rivers and the coast. Others are relate to providing for tourists that may wish to cycle in or through the District as part of a wider regional network. The accompanying Strategy to this Action Plan is clear that its main purpose is to provide walking and cycling facilities and opportunities relating to Councils township and urban areas where they will have the most benefit to Selwyn citizens.

Creation of these tracks can be very difficult where boundaries are not evident on site, terrain along the unformed road alignment is actually unsuitable for use, or where adjoining land owners like farmers also have historical access rights that need to be considered.

Other suggestions include using railway reserve that follow the main rail line to create cycle links but this requires the approval of KiwiRail as discussed in Section 4.4.1

Council is aware of the following possible track development opportunities:

- Port Hills Access: Council considers that a "Port Hills Recreational Access and Use Strategy" could be developed. This would have to be across Council departments and also involve the Christchurch City Council to see how best to plan and provide a joined up network centring on that area from Kennedys Bush across to Tai Tapu and up to the Summit Rd. It would also need to take into account learnings from the

recent large Port Hills fires related to how public access may need to be controlled in places to prevent other similar occurrences.

- Lake Ellesmere Loop Access: developing a series of interlinked tracks that focus on allowing public access along the shore line of Lake Ellesmere linking back and around to the adjoining Ellesmere Ward townships. This would need to use a combination of road reserve and/or "Queens Chain" to achieve. This would be a significant undertaking in terms of practical and cultural relating to the Lake and would need to be

- Mountains to Sea Cycleway: A cycleway from Arthurs Pass to the Waimakariri River across the District that utilises tracks along both rail and both formed and unformed road reserves. Technically difficult to achieve in the high country it would be predominately for tourists. The scale of the venture means it would require a regional planning and implementation approach. Council has applied to the Tourism Infrastructure Fund for funding to carry out a feasibility study.

- Hill and High Country Access. Access in these areas relates mostly that sought by hikers and hunters. This can be in conflict to other land uses such as High Country stations and forestry operations.

4.5 On-Road Cycle Facilities

These are cycle facilities specifically provided within the carriageway of formed roads. In urban areas, specific lanes can be provided on busier roads with specific treatments at intersections such as the use of different coloured surfacing to better distinguish and separate cyclists from vehicular traffic.

In some cases, a sealed road shoulder distinguished from the traffic lanes by a painted edge-line may be an acceptable alternative to a cycle lane, however, such a facility is subject to the same width requirements as a cycle lane before it can be considered an appropriate provision for cyclists. This is more typical on Selwyn Council's busier Arterial and Collector type rural roads which have been widened to 8.5m to improve overall safety and efficiency, and have sufficient seal width to enable a sealed shoulder to be marked. Unfortunately the majority of the District's rural sealed network carriageways are relatively narrow, averaging 6m wide which precludes a specific marked shoulder or even a centre line.

While this issue exists for individual cyclists on rural roads, it becomes more apparent when groups of competitive cyclists ride along narrow rural roads at 2-3 abreast for training purposes and races. As Selwyn Council's roads become more extensively used by heavy vehicles such as dairy tankers, this increases the overall road risk as vehicles have to cross road centre lines to pass cyclists. This is where initiatives around education, behaviour change etc. expressed in Section 3.2 of this Action Plan have an important role to play.

Narrow marked shoulders can increase risk to cyclists and it is better that the lane remains unmarked. In urban situations, wide kerbside lanes may be an acceptable provisions for cyclists, especially if parking is minimal or prohibited during times of peak traffic flow. Bus lanes can also be shared by cyclists if the width is sufficient and provided for under any relevant bylaw provisions.

Selwyn Council is looking to progress a number of seal widening projects across the District as part of the 2018-28 Long Term Plan. While the primary purpose of these projects is to cater for the increasing heavy traffic on these links, cyclist stand to benefit from having a wider shoulder to cycle on.

4.6 Crossing Facilities and Intersection Treatments

Any walking or cycle route that uses the types of pathways detailed previously will invariably connect with or cross a road. At these locations, the interaction and safety of pedestrians and cyclists with motor vehicle traffic must be carefully considered. The highest proportion of walking and cycling accidents occur at intersections, driveways and crossing points.

A crossing point may use kerb extensions and/or median islands in the centre of the road to shorten the distance to cross the road and exposure to oncoming traffic. Crossing places provide necessary linkage between various network components such as pathways, allowing permeability, connectivity and continuity of journey for pedestrians and cyclists.

These maybe as simple, but important, as reducing the height of the kerb and channel at crossing points to allow push chairs and mobility scooters to cross easily. Where these have not been provided previously Selwyn Council retro fits these at the time it undertakes any footpath maintenance alongside.

Figure 6: Tactile Paver treatment

Higher volume crossing points have typically used pedestrian crossings, commonly referred to as "zebra crossings", which provides pedestrians with the "right of way" over approaching traffic once they have stepped onto the marked crossing. In more recent times these have

been shown not to be very safe as it assumes traffic will stop which it doesn't always now for pedestrians. Similar issues have occurred previously with zebra crossing on Springs Rd at Prebbleton relating to this.

Instead crossing points are established to make those using them more responsible for their own safety supported by the appropriate engineering treatments. For example using median islands, or alternately called refuge islands, allows pedestrians a safe place to wait in the centre road if they cannot make the make the complete crossing in one go based on traffic.

"Kea crossings" are supervised crossings that are used before and after school to enable school children to safely cross the road outside schools by stopping traffic using "lollipop" swing out signs. They are operated by schools to specific criteria established by the NZ Transport Agency and to the approval of the NZ Police. Selwyn Council provides the necessary engineering works to establish these such as kerb extensions, and hardware for approved facilities.

Through the Rolleston and Lincoln Town Centre Upgrades a number of existing intersections will be upgraded to traffic signals to cope with the expected traffic growth on these local networks. Through their progressive implementation these signals will also include signalled pedestrian crossing facilities. This will be very beneficial in improving the ability for pedestrians to safely walk around our expanding town centres which are continually growing.

Crossing points and related facilities may be used in mid-block locations, for example to provide connectivity between a path and a specific location (e.g. a school, a shopping centre). They can also be used at intersections, for example where a road with an adjacent shared path intersects with another road; this situation is more complex as shared path users will be exposed to conflict with turning traffic from the parallel road and all traffic passing on the intersecting road.

4.7 Signage and Marking Considerations

Signage and pavement marking is a vital part of all walking and cycling routes, apart from a standard footpath that is legally understood as being provided for pedestrians only. These range for those needed for safety and traffic control, to way-finding along a route and need to consider:

- the user groups for which the path, trail or track is intended (i.e. for shared use or walking or cycling exclusively).
- Indicate the start and finish of any path, trail or track
- Provide way-finding and directional information
- Provide regulatory information (such as stop or give-way requirements at crossings and intersections)
- Route "branding" such as for a Rail Trail

Signs are also required to formalise a shared path and can also be used for educational or information purposes, for example on recreational trails or tracks.

Pavement markings on sealed surfaces can complement any signage used, and these include:

- Delineation of "on road" cycle routes within the carriageway and at intersections
- At private vehicle entranceways indicating the presence of cyclists and pedestrians on shared pathways

Markings can also include using different colours and textures on paving e.g. green asphaltic cement at intersections to clearly show where cyclist lanes and waiting areas are. Tactile paving is also being used to differentiate key crossing points along new footpaths being installed to assist the persons that are visually impaired to locate safe crossing points.

Figure 7: Rail Trail Signage South of Lincoln

4.8 Unformed Legal Roads

4.8.1 Background

Although unformed legal roads are not part any formally recognised walking and cycling networks in the District, Selwyn Council receives regular enquiries about use of unformed legal roads. There are hundreds of kilometres of unformed, unmaintained, public road reserve in the District. These roads appear on legal survey plans and are commonly referred to as "paper" roads and are usually 20m wide. They occur throughout the District but more generally in the hill and high country areas and alongside rivers and other water bodies. In the Hill and high country they can be used by trampers and hunters while fishermen use those to rivers etc.

Unformed legal roads are corridors defined by legal survey, often dating back to the late 1800's, as roads but which have not been formed or maintained as roads or pathways by

Selwyn Council or its predecessors as there was no need to do so for either property access or as part of the development of the District's overall road network. Sometimes they may be delineated by fences on one or both boundaries but usually their alignments are not visible.

In most cases, the land in question is farmed as part of the adjacent property and is periodically stocked, worked, and planted and has been amalgamated into the operation and use of an adjoining property. Selwyn Council acknowledges that this situation is mutually beneficial to it and the property owner. Alternatively, the unformed legal road may still be in its natural form and covered with native bush, or it may be swamp, a cliff-face or even under a lake or river; regardless of its situation, drains, water-races and other obstacles may traverse it unexpectedly. In some cases, for example alongside rivers, lakes or the coast, the original land associated with the road has disappeared through subsidence or erosion.

The upgrading and maintenance of unformed legal roads for very limited use is not economic or practical considering the considerable demands already on Selwyn Council to manage the existing formed network. The existence of a legal road is no indication of access or the feasibility, practicality or safety of passage along the corridor and exist on a "as is where is basis".

Problems arise when the public's expectations of right of access conflicts with any historical or perceived right to occupy by the adjoining property owner. Tensions arise where the different parties try to assert their respective rights based on property and road boundaries that cannot be easily identified and rights and obligations that are often poorly understood.

There is no clear legal right for adjacent owners, vehicle drivers or cyclists to use unformed legal roads. The rights of pedestrians on unformed legal roads are clearer but these rights come with these obligations:

- Not to disrupt the legal activities of others, like a farmer whose land the road passes though;
- Not to damage the land, features or flora and fauna on it;
- To look after their own health and safety if using such roads;
- To be responsible for their own actions;
- To know the boundaries of the legal road's alignment; and
- Not to trespass on private property.

4.8.2 Selwyn Council's Position

Selwyn Council's position is that it supports use of unformed legal roads for recreational walking on a "as is where is" basis i.e. they exist in their unaltered states free of unreasonable obstacles that an adjoining property owner may have imposed on the road.

Limited bike or vehicular use is accepted where if a reasonable track already exists, for example to a river or lake side. This is on the basis Selwyn Council has no obligation to its continuing existence and maintenance. Selwyn Council will take advice and respect the views from the Department of Conservation or Environment Canterbury where they may have some issue with the use of an unformed road relating to their land or activities alongside.

4.8.3 Gates and Fences

Section 344 of the Local Government Act 1974 sets out situations where gates and fences can be erected across roads. This has particular relevance for unformed legal roads where an adjoining property owner such as a farmer has fenced or erected a gate across a paper road that could deny the public reasonable access along a paper road. In situations such as this, Selwyn Council requires the gate to remain unlocked and/or a stile to be provided over the fence at the property owners' expense to maintain foot access.

4.8.4 Closure of Unformed Legal Roads

Selwyn Council regularly receives requests from adjoining property owners to close paper roads, legally referred to as "stopping" the road. These requests are processed by Selwyn Council in accordance with the mechanisms available under either the Public Works Act or Local Government Act 1974. One of the criteria Selwyn Council will consider in formulating its position is whether the paper road should be retained for any recognised or inherent value for public access.

4.8.5 Development and Maintenance

Selwyn Council will consider using appropriate sections of unformed legal road as an option whenever it investigates new walking and/or cycling links and networks as discussed in Section 4.4.2 and 4.4.3.

4.9 Design Requirements for Paths, Trails and Tracks

The principal standards applicable to the development of pedestrian and cyclist facilities throughout the District, and that Selwyn Council endeavours to impose upon developers, are detailed in:

- The Selwyn Council District Plan;
- Selwyn Council Engineering Code of Practice.

These documents and this Action Plan make reference to other specific design and guidance information that are also used to inform how walking and cycling facilities are designed and provided. This can also include that from Austroads Design Standards, the NZ Transport Agency, Christchurch City Council, and the Ministry of Economic Development NZ Cycle Trail Design Guide 2015.

Specific engineering standards will be applied to the construction and renewal of walking and cycling paths, trails and tracks where considered applicable. These standards, have been developed from the standards and guidelines and are listed below, along with references to the appropriate standards and guidelines where more complex design details are required. Councils Engineering Code of Practice will be updated as the opportunities arise to cross reference any relevant requirements.

The design of all walking and cycling facilities in urban areas shall include the principles of CPTED (Crime Prevention through Environmental Design) see "Safer Canterbury, Creating Safer Communities" 2004, Canterbury Safety Working Party.

Table 2: Standard Township Footpaths – Detailed Engineering Requirements

<table>
<tr><th>Property</th><th colspan="2">Design Specifications</th></tr>
<tr><td>Width</td><td colspan="2">- 1.5m minimum clear width (including around obstructions like poles)
- 2.5m minimum (or up to the road boundary if appropriate) where there are high volumes of pedestrians such as near schools, in shopping centres and outside churches in urban areas.</td></tr>
<tr><td>Crossfalls and gradients</td><td colspan="2">- Maximum footpath crossfall of 2.0% (minimum 1.25%)
- Maximum longitudinal footpath gradient of 3%
or up to 7.1% if treated as a ramp under NZS 4121: 2001</td></tr>
<tr><td rowspan="6">Materials</td><td colspan="2">Footpaths:</td></tr>
<tr><td>Construction</td><td>Renewal</td></tr>
<tr><td>- asphaltic concrete (hotmix)
or
- unreinforced concrete with a broom finish;
or
- interlocking concrete pavers</td><td>- asphaltic concrete (hotmix)
or
- unreinforced concrete with a broom finish
or
- interlocking concrete pavers</td></tr>
<tr><td colspan="2">Driveways crossing berms and/or footpaths:</td></tr>
<tr><td>Construction</td><td>Renewal</td></tr>
<tr><td>- asphaltic concrete (hotmix)*
or
- interlocking concrete pavers for township/commercial areas</td><td>- asphaltic concrete (hotmix)*
or
- interlocking concrete pavers for township/commercial areas</td></tr>
<tr><td colspan="2">Prohibited materials (on footpaths or driveways):</td></tr>
<tr><td colspan="2">- Stamped concrete,
- Concrete with a float finish (steel or wood)
- Patterned concrete
- Cobble stones</td></tr>
<tr><td>Accessibility Standards</td><td colspan="2">- NZS 4121: 2001 Design for Access and Mobility: Buildings and Associated facilities</td></tr>
<tr><td>Lighting</td><td colspan="2">- AS/NZS 1158.3.1:2005 Road lighting - Pedestrian areas
- AS/NZS 1158.6:2010 Road lighting - Luminaires
- Higher levels of illumination than NZS 1158.3.1 will be provided when adjacent carriageways are lit to high standards and if Selwyn Council considers that additional illumination is required to improve public safety.</td></tr>
</table>

*The design specification for Driveway construction and renewal shall be in accordance with the requirements of the "Vehicle Crossing Information Pack".

Table 3: Shared Use Connecting Path - Detailed Engineering Requirements

Property	Design Specifications
Width	**Urban** - 2.5m minimum width - Dimensions for mobility access as detailed in: NZS 4121:2001; - Austroads: AP_G88-11 Cycling Aspects of Austroads Guides 2011 - Austroads: AGRD06A 09 Guide to Road Design - Part 6A- Pedestrian and Cyclist Paths - Austroads: AP-R287/06 Pedestrian and cyclist conflict minimisation on shared paths: 2006 **Rural** - 1.5m minimum clear width with ability to be widened up to 2.5m in the future - Paths wider than 2.5m not permitted adjacent to road carriageways and may require measures to prevent by cars and/or truck use
Crossfalls and gradients	- Maximum footpath crossfall of 2.0% (minimum 1.25%) - Maximum longitudinal footpath gradient of 3% - or up to 7.1% if treated as a ramp under NZS 4121: 2001
Materials	Path: - asphaltic concrete (hotmix) *or* - unreinforced concrete with a broom finish - small areas of interlocking concrete pavers are permitted.
	Driveways crossing berms and/or footpaths: - As for the section of path being crossed - Any driveway surfacing that crosses the path and by its appearance suggests that the driveway traffic has precedence over those using the path
	Prohibited materials (on footpaths or driveways): - Stamped concrete, - Concrete with a float finish (steel or wood) - Patterned concrete - Cobble stone
Accessibility Standards	- As required by cycling standards - NZS 4121 – Design for Access and Mobility: Buildings and Associated Facilities – is desirable but not essential in all urban circumstances

Lighting	- Lit only in urban areas or where there is high night-time demand. Consider CPTED principles in any decisions - AS/NZS 1158.3.1:2005 Road lighting - Pedestrian areas - AS/NZS 1158.6:2004 Road lighting - Lighting for roads and public spaces - Higher levels of illumination than provided by NZS 1158.3.1 will be provided when adjacent carriageways are lit to high standards and if the Council considers that additional illumination is required to improve public safety.

Table 4: Recreational Rural Paths - Detailed Engineering Requirements

Property	Design Specifications
Width	1.5m wide minimum designed according to a Grade 2 trail as specified by: NZ Cycle Trail Design Guide, Ministry of Economic Development: 2015 [1]
Materials	Path: - Well graded GAP20 Aggregate - Asphaltic concrete (hotmix) on short sections if needed for road and bridge approaches and traction
	Driveways crossing berms and/or footpaths: - As for the section of path being crossed as a minimum
	Prohibited materials (on footpaths or driveways): - Stamped concrete - Concrete with a float finish (steel or wood) - Patterned concrete - Cobble stones
Accessibility Standards	Where appropriate SNZ HB 8630:2004 Tracks and outdoor visitor structures and NZ Cycle Trail Design Guide, Ministry of Economic Development: 2015
Lighting	- Not required

1 This assumes a path located in the plains area of the district where terrain is conducive to this being realistic to achieve. Where paths are located in hill and high country areas the grade and level of difficulty may increase based on what's practical and affordable.

Table 5: On-Road Cycle Lanes- Detailed Engineering Requirements*

Property	Design Specifications
Width	Depends on vehicle speeds, refer to: - NZTA: NZ Supplement to the Austroads Guide to Traffic Engineering Practice Part 14: Bicycles 2008
Materials	Maximum size 10 mm stone chip seal suggested by: - Austroads: AP G88-11 Cycling Aspects of Austroads Guides 2011
Lighting	- AS/NZS 1158.6:2004 Road lighting - Lighting for roads and public spaces

In addition, detailed design of cycle lanes and other on-road cycling facilities such as wide kerbside lanes, wide shoulders and bus-cycle lanes must refer to:

- NZTA: NZ Supplement to the Austroads Guide to Traffic Engineering Practice Part 14: Bicycles 2008.
- Austroads: AP_G88-11 Cycling Aspects of Austroads Guides 2011.
- NZTA: Manual of Traffic Signs and Markings, Part 1 Traffic Signs.
- NZTA: Manual of Traffic Signs and Markings, Part 2 Markings.

Table 6: Walking Track - Detailed Engineering Requirements

Property	Design Specifications
Width	- Approximately 0.5m minimum at ground level. - Wider at shoulder level etc. as suggested by: SNZ HB 8630:2004 Tracks and Outdoor Visitor Structures

Materials	Track:
	- Natural ground cleared of vegetation or short grass
	or
	- in areas where volumes are heavier or there are particular needs:
	  - Compacted metal.
	  - Timber 'board-walks'
	or
	- Other appropriate materials as determined

	Driveways crossing berms and/or footpaths: - As for the section of track being crossed. If the driveway crossing is sealed the track should also be sealed for approximately 3m on either side of the driveway to avoid the appearance of a right of way in favour of the driveway.
	Prohibited materials (on footpaths or driveways): - Stamped concrete - Concrete with a float finish (steel or wood) - Patterned concrete - Cobble stones - Any driveway surfacing that crosses the path and by its appearance suggests that the driveway traffic has precedence over path users (but see "Driveways crossing berms and/or footpaths" immediately above)
Accessibility Standards	- SNZ HB 8630:2004 Tracks and Outdoor Visitor Structures - Compliance with NZS 4121:2001 Design for Access and Mobility: Buildings and Associated Facilities may be provided/required in some circumstances.
Lighting	- Not required

4.10 Design of Crossing Facilities and Intersection Treatments

Design of pedestrian crossing facilities should be made in accordance with:

- NZTA: Pedestrian Planning and Design Guide: 2007.
- Selwyn Council's Engineering Code of Practise: Part 8 Roading transport 8.17.8 road crossing for pedestrians.

Design of cycle crossing facilities and intersection treatments should be made in accordance with:

- AUSTROADS: AP G88 11 Cycling Aspects of Austroads Guides: 2011.
- NZ Supplement to Austroads Guide to Traffic Engineering Practise Part 14 Bicycles: 2008.

4.11 Other Applicable Standards and Guidelines

The documents in the following tables, including those referred to above are routinely used to inform engineering judgements made about these facilities and to guide their design and maintenance.

	Standards	Guides
Walking		NZTA: Pedestrian Planning and Design Guide: 2009 Selwyn Council Engineering Code of Practise: Part 8 Roading transport 8.17.8 road crossing for pedestrians SNZ HB 8630:2004 Tracks and Outdoor Visitor Structures
Cycling	AS 2890.3:2015 Parking facilities - Bicycle parking facilities	AUSTROADS: AP G88 17 Cycling Aspects of Austroads Guides: 2017 LTSA: Cycle Network and Route Planning Guide: 2004 Ministry of Economic Development: Cycle trail design guide: 2015 CCC: Christchurch Cycle Design Guidelines: 2013 NZTA: Manual of Traffic Signs and Markings, Part 1 Traffic Signs NZTA: Manual of Traffic Signs and Markings, Part 2 Markings NZ Supplement to Austroads Guide to Traffic Engineering Practise Part 14 Bicycles: 2008
Walking & Cycling		AUSTROADS: AGRD06A 17 Guide to Road Design - Part 6A- Pedestrian and Cyclist Paths: 2017 Selwyn Council Engineering Code of Practise: Part 10 Reserves, streetscapes and open spaces 10.7.2 Pedestrian and cycle paths
Accessibility	NZS 4121:2001 Design for Access and Mobility: Buildings and Associated Facilities AS/NZS 1428.3:1992 Design for Access and Mobility - Requirements for children and adolescents with physical disabilities AS/NZS 1428.4:2009 Design for Access and Mobility - Tactile Indicators	
Lighting	AS/NZS 1158.0:2005 Road lighting – Introduction AS/NZS 1158.1.1:2005 Road lighting - Vehicular traffic (Category V) lighting - Performance and design requirements AS/NZS 1158.1.2:2010 Road lighting - Vehicular traffic (Category V) lighting - Guide to design, installation, operation and maintenance AS/NZS 1158.3.1:2005 Road lighting - Pedestrian area (Category P) lighting - Performance and design requirements AS/NZS 1158.4:2015 Road lighting - Lighting of pedestrian crossings AS/NZS 1158.5:2014 Road lighting - Tunnels and underpasses AS/NZS 1158.6:2015 Road lighting - Luminaires	Selwyn Council Engineering Code of Practise: Part 11 Lighting 11.9.3 Category P (Cycleways and paths in reserves Lighting) Selwyn Council Engineering Code of Practise: Part 10 Reserves, streetscapes and open spaces 10.6.9 (Lighting)
No longer included	NZS 3116:2002 Concrete Segmental Paving NZS 4404:2010 Land Development and Subdivision Engineering NZS 5828:2015 Playground Equipment and Surfacing NZS/AS 1657:1992 Fixed Platforms, Walkways, Stairways and Ladders. Design, construction and installation AS 3996:2006 Metal Access Covers, Road Grates and Frames SNZ HB 44:2001 Subdivision for People and the Environment SNZ HB 5828.1:2006 General Playground Equipment and Surfacing Handbook	
CPTED		"Safer Canterbury, Creating Safer Communities" 2004, Canterbury Safety Working Party

5. Financial and Implementation Programmes

This Section reflects that agreed through the 2018-28 LTP process.

Cost are itemised on each of the Township Network Plans for information.

Prioritisation Process

Two criteria's are used to inform the relative importance of each footpath project. They are "linkage" and "place". Supplementary information including the traffic volumes, road hierarchy, "alternative route" and "comments" are used to inform the score assigned. This allows transparency behind the proposed forward works program.

Summary Cost for all Township Network Plans

All Townships	Length (m	Cost ($)	
Important Links	26385	$	3,390,200
Footpath Additions	32430	$	3,561,250
Total	58815	$	6,951,450

N.B. Important Links are footpath projects that have an average score of Medium or higher for the "linkage" and "place" criteria. Footpath Additions have an average score below Medium. Detailed explanation of the prioritisation process can be found in Appendix C.1.

Summary Cost for all Between-Township Network Plans

	Cost ($)*	
Between-Township Cycleways	$	12,849,250

Township Network Plan Cost Summary

Coalgate	Length (m)	Cost ($)
Important Link	940	$ 103,400
Footpath Additions	5095	$ 560,450
Total	6035	$ 663,850
Darfield	**Length (m)**	**Cost ($)**
Important Link	3560	$ 391,600
Footpath Additions	4100	$ 451,000
Total	7660	$ 842,600
Doyleston	**Length (m)**	**Cost ($)**
Important Link	0	$ -
Footpath Additions	1360	$ 149,600
Total	1360	$ 149,600
Dunsandel	**Length (m)**	**Cost ($)**
Important Link	160	$ 17,600
Footpath Additions	3770	$ 414,700
Total	3930	$ 432,300
Hororata	**Length (m)**	**Cost ($)**
Important Link	0	$ -
Footpath Additions	570	$ 62,700
Total	570	$ 62,700
Kirwee	**Length (m)**	**Cost ($)**
Important Link	500	$ 55,000
Footpath Additions	3190	$ 350,900
Total	3690	$ 405,900
Leeston	**Length (m)**	**Cost ($)**
Important Link	330	$ 36,300
Footpath Additions	900	$ 92,950
Total	1230	$ 129,250
Lincoln	**Length (m)**	**Cost ($)**
Important Link	560	$ 61,600
Footpath Additions	0	$ -
Total	560	$ 61,600
Prebbleton	**Length (m)**	**Cost ($)**
Important Link	7060	$ 1,080,750
Footpath Additions	0	$ -
Total	7060	$ 1,080,750
Rolleston	**Length (m)**	**Costs ($)**
Important Link	6940	$ 888,800
Footpath Additions	0	$ -
Total	6940	$ 888,800
Sheffield	**Length (m)**	**Cost ($)**
Important Link	0	$ -
Footpath Additions	1660	$ 182,600
Total	1660	$ 182,600
Southbridge	**Length (m)**	**Cost ($)**
Important Link	460	$ 50,600
Footpath Additions	3690	$ 405,900
Total	4150	$ 456,500
Springfield	**Length (m)**	**Cost ($)**
Important Link	0	$ -
Footpath Additions	1370	$ 150,700
Total	1370	$ 150,700
Springston	**Length (m)**	**Cost ($)**
Important Link	710	$ 136,400
Footpath Additions	390	$ 42,900
Total	1100	$ 179,300
Tai Tapu	**Length (m)**	**Cost ($)**
Important Link	360	$ 39,600
Footpath Additions	250	$ 27,500
Total	610	$ 67,100
Waddington	**Length (m)**	**Cost ($)**
Important Link	610	$ 67,100
Footpath Additions	1275	$ 140,250
Total	1885	$ 207,350
West Melton	**Length (m)**	**Cost ($)**
Important Link	1885	$ 207,350
Footpath Additions	50	$ 5,500
Total	1935	$ 212,850
Whitecliffs	**Length (m)**	**Cost ($)**
Important Link	2150	$ 236,500
Footpath Additions	990	$ 108,900
Total	3140	$ 345,400

Between-Township Network Plan Cost Summary

Between-Township Cycleway Projects

ID	Inter-Township Cycleway	Estimated Cost	Proposed LTP 2018 Program Year
I1	Leeston to Doyleston Cycleway	$ 895,000	2018/19
I2	Lincoln to Tai Tapu Cycleway (via Perymans Road)	$ 100,000	2019/20
I3	Rolleston to Templeton Cycleway	$ 400,000	2020/21
I4	Prebbleton to CSM1 Cycleway	$ 500,000	2020/21
I5	Darfield to Kirwee Cycleway	$ 1,000,000	2022/23
I6	Jones Road Cycleway	$ 750,000	2023/24
I7	Templeton to Prebbleton Cycleway	$ 512,000	2024/25
I8	West Melton to Rolleston Cycleway	$ 750,000	2026/27
I9	Springston to Rolleston Cycleway	$ 500,000	2027/28
I10	Rolleston to Burnham Cycleway	$ 700,000	2028/29
I11	Springs Road to Lincoln (Boundary Road to Hub) Cycleway	$ 126,000	2031/32
I12	Leeston to Southbridge Cycleway	$ 812,500	2031/32
I13	Glentunnel to Whitecliffs Domain Cycleway	$ 503,750	2032/33
I14	Darfield to Sheffield Cycleway	$ 1,600,000	2033/34
I15	Sheffield to Springfield Cycleway	$ 1,225,000	2035/36
I16	West Melton to Kirwee Cycleway	$ 1,650,000	2035/36
I17	West Melton to Waimakariri River Park Cycleway	$ 825,000	2036/37
	Total	**$ 12,849,250**	

Likely NZTA subsidy from Selwyn Business Case or by inclusion in Low Cost/Low Risk Work Category

N.B. Other cycleways will be assessed on their merits for funding by NZTA.

Council will progressively confirm projects per LTP Cycle

Other projects identified through other work streams or consultation but not currently agreed to be funded:

Description	Priority	Est Cost	Comments
Levi Road to Weedons Interchange Cycleway	medium	$ 325,000	Introduce to coincide with the District Park Development
Glentunnel/Glenroy/Downs Rd/Hororata/ Coalgate Ring Cycleway	very low	$ 3,000,000	Technical difficulties crossing muiple drains along Downs Rd
Glenntunnel to Hororta Cycleway	very low	$ 2,000,000	6.6km long and requires bridge crossing facilities
Darfield to Coalgate Cycleway	very low	$ 3,500,000	along SH77 12km long and requires bridge crossing facilities
Dunsandel to Doyleston Cycleway (Leeston)	very low	$ 2,400,000	16km long