

Masterton District Council

CYCLING STRATEGY 2017



A strategy to advance cycling within
the Masterton District



This Cycling Strategy has been prepared for Masterton District Council by Roger Boulter of Boulter Consulting.

Council wishes to acknowledge the valuable contribution and comment provided by the members of the Masterton Cycling Advisory Group, throughout the Strategy preparation process.

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An introduction from Her Worship the Mayor

I am delighted to introduce Masterton's new cycling strategy, which is the first update of this invaluable document since 2009. Cycling is becoming increasingly important in our daily lives, as a method of transport to and from work or school, as a sport and also as a recreational activity. We are extremely fortunate to live in an area which has so much going for it in terms of cycling, with opportunities for young and old to take advantage of.

Our roading network already offers some specific cycle lanes and increasing this type of infrastructure is clearly something to be considered, along with road safety education of both cyclists and motorists.

The Wairarapa is now firmly established as an ideal location for the staging of elite cycling events, with the New Zealand Cycle Classic taking place throughout the region each year. The top riders thrive on the challenges that our roads present them, from the straightest and flattest roads they will ever encounter, through to some energy-sapping hill climbs which rank amongst the toughest on the circuit.

Masterton District Council has been proud to support elite events and also the vast numbers of people who ride our roads and tracks for fitness, fun, or merely as an environmentally-friendly and economical way to get to work or school. The annual Huri Huri Bike Festival showcases cycling opportunities in our district, from the challenging mountain bike course through Castlepoint Station to fun events for young and old.

Our council has invested heavily in a network of recreational trails which carve a track through some of the most picturesque landscape in the country and these are increasingly popular with both tourists and the numerous residents who utilise them on a weekly or even daily basis. We have plans to extend these further as we strive to make even more of our wonderful rural area accessible to the general public.

With such a significant investment taking place across many different areas of our business, from parks and reserves to roading and events, it's vital that we adopt a robust strategic approach to cycling provision in Masterton now and in the future. For cycling to be safe and attractive in Masterton, a range of different actions need to be taken by a range of different agencies, working together with each other.

We are indebted to those who have assisted with this, from our own council staff to the consultants we and others have engaged and the many volunteer organisations who work tirelessly to ensure that cycling opportunities continue to grow and develop in the Masterton district.

Lyn Patterson

Mayor of Masterton



Cycling Strategy 2017 – Executive Summary

Masterton District Council supports cycling, and to that end has had a Cycling Strategy since 2009. This year, it has reviewed its strategy, and published a new Cycling Strategy 2017.

Cycling strategies are important because a wide range of different types of actions, working together, are necessary in order for cycling in Masterton to be attractive and safe. The 2009 strategy needed to be reviewed, because much has changed in the intervening years, notably in such areas as infrastructure, government funding, as well as changes in how cycling is perceived.

Cycling in Masterton varies, including day-to-day ‘utility’ cycling (like commuting to work or school), cycling for sport, leisure or touring (often in the rural areas around Masterton). Cyclists, and potential cyclists, vary in their experience, and in their requirements. Less experienced cyclists, and people who are interested in cycling but concerned about motor traffic, may prefer quiet roads or off-road paths. More experienced cyclists will often prefer main roads for the same journey time advantages which these roads give to motor traffic.

This Cycling Strategy document outlines the range of types of measure which will be pursued over the coming years to make cycling in Masterton more attractive and safe. Although Masterton District Council is responsible for much – including most roads and public parks – several other agencies have joined with Council in this Cycling Strategy. These include the NZ Transport Agency, the Wairarapa Road Safety Council, and Greater Wellington Regional Council. Together these other agencies are responsible for State highways, funding support for local Council roads, road safety education, cycling promotion (for example, working with local schools) and regional route network planning.

Voluntary initiatives also play an important role. The Trails Wairarapa Trust and Wairarapa Multisports Club join with Council and the other agencies in a Cycling Advisory Group, which meets about twice each year and has assisted in the preparation of this Cycling Strategy.

Each year, an Implementation Plan will be prepared, listing specific projects through which this Cycling Strategy will be implemented. This will be reviewed at least once each year, and will take into account the funding committed by the agencies mentioned above, and other funding which others (for example, government agencies) might contribute.

The Cycling Strategy outlines the types of measures which would be involved in the Strategy’s implementation. This includes measures to improve networks of routes (for the various different types of cyclist) for both urban Masterton and the rural areas; types of infrastructure which might be implemented for this purpose; and non-infrastructure measures (such as events and promotional work). These general descriptions will be given more specific form each year by the Implementation Plan, which will in turn be reflected in Masterton’s Long Term Plan and other statutory programmes.

Masterton's priorities

Masterton's *Long Term Plan 2015-25* set out several "Key new investments over the next ten years" which included this one:

"supporting ambitions for Masterton to become a renowned cycling centre by investing in on and off road cycling routes"

The Long Term Plan also set out several "Outcomes", as the type of situation desired for the town and its rural areas. These are as follows:

"Outcome 1: A Strong, Resilient Economy"

"Outcome 2: A Sustainable, Healthy Environment"

"Outcome 3: An Active, Involved and Caring Community"

"Outcome 4: A Knowledgeable, Learning Community"

"Outcome 5: An Easy Place to Move Around"

"Outcome 6: A Reliable and Well-Maintained Infrastructure"

Under each of these *Outcomes*, Council lists how it contributes to the outcome, and gives examples of this. Cycling is mentioned several times, as follows:

Outcome	Council Contributes to this Outcome by:	For Example:
1: A Strong, Resilient Economy	Encouraging and supporting businesses to grow	Promoting Wairarapa as the national road cycling centre
3: An Active, Involved and Caring Community	Encouraging people to be active	Promoting cycle trails and promoting on-road cycling events
5: An Easy Place to Move Around	Promoting safe alternatives to cars	Cycle lanes

This Cycling Strategy aims to help bring the *Outcomes* about, in the ways described below. Council is also conscious that any cycling which substitutes for travelling by car helps mitigate greenhouse gas emissions, which in turn contributes to a healthy environment.

Cycling around urban Masterton

Cyclists may be expected on any road – like motorists, they will want to go from any one place to any other place.

Confident and skilled cyclists will tend to follow the main roads – as generally the most efficient and safest way of getting from ‘A’ to ‘B’.

Many people would like to cycle but are concerned about motor traffic. These cyclists may favour quieter roads or off-road paths. Main roads, quieter side roads, and off-road paths have been identified in this Cycling Strategy’s proposed cycle route network for the above different types of cyclists.

‘Cycle routes’ wouldn’t necessarily require cycle lanes (marked on the road) but where this is considered necessary, there may not be space for on-street car parking as well.

Children need to become familiar with cycling on quieter roads. Cycling on roadside footpaths, although seeming safer than on the road, may not be (for example, cars reversing from driveways with limited visibility), as well as being illegal in most cases. Cyclists crossing intersections from footpath to footpath may also be at risk from turning traffic, which is more likely to be focusing attention on the road traffic. In some cases roadside footpath cyclists may be a hazard (or at least an inconvenience) to pedestrians.



These improvements to Colombo Road, near Lakeview School, provided a shared path for school cyclists, and also on-road cycle lanes for the more confident cycle tourists who will also use this route

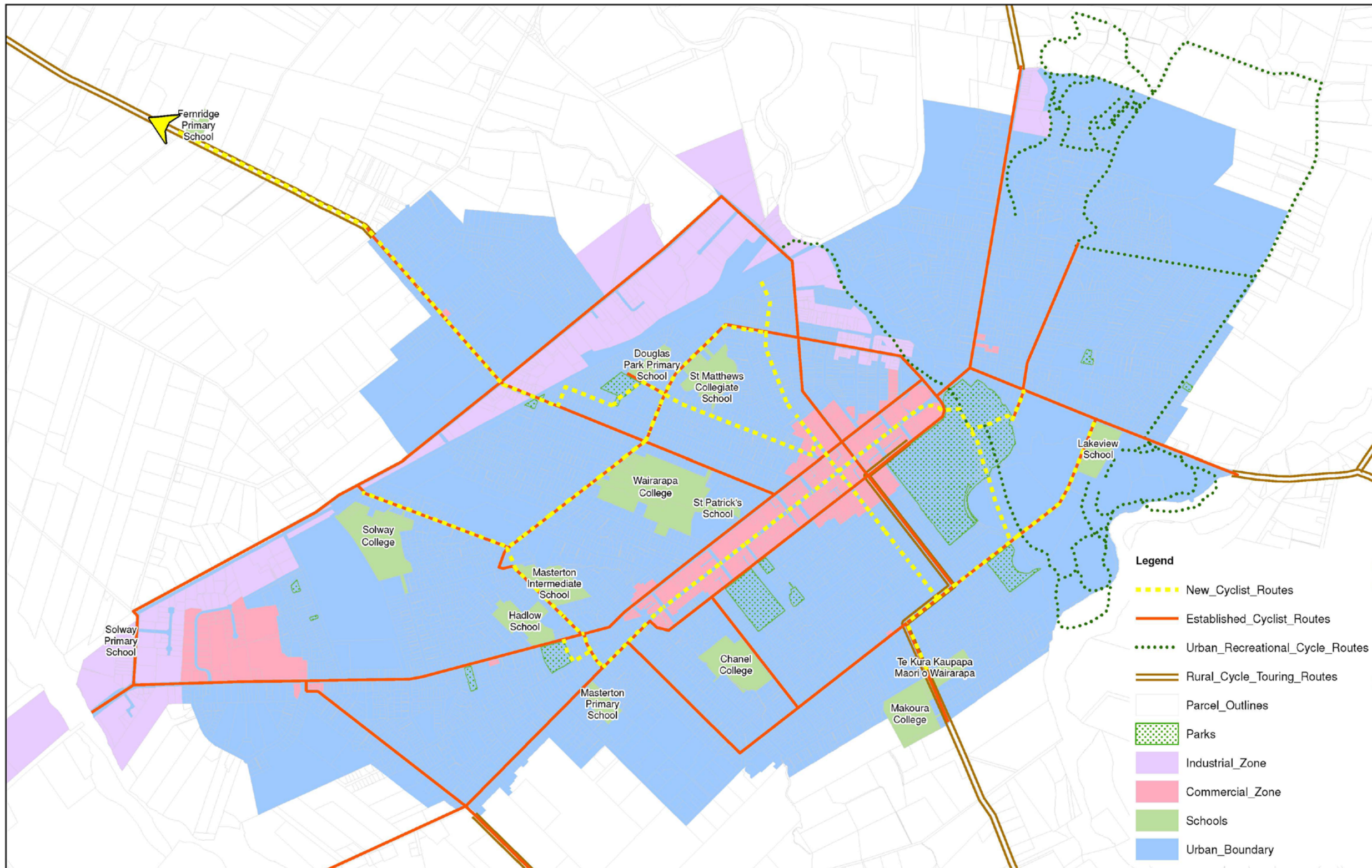
Even short journeys around town have significant health benefits. Frequent regular exercise, by people of all ages, has been shown to play a significant role in guarding against heart disease and other ailments. Often this is more important than less frequent, more strenuous, physical activity.

Map 1 shows a proposed ‘cycle route network’ for Masterton town, on which much attention under this Cycling Strategy will be focused. This shows:

- ***Established cyclist routes:*** routes for established day-to-day (‘utility’) cyclists
- ***New cyclist routes:*** routes for cyclists who may have less skill and experience in interacting with motor traffic.
- ***Urban recreational cycle routes:*** routes expected to be mainly used for casual recreation, over short distances, for the pleasure of the ride and the places; maybe for an afternoon, or 1-2 hours, rather than for multi-day trips, and
- ***Rural touring cycle routes:*** routes connecting to rural recreational, sport or touring routes. Cyclists using these routes will generally be fit and experienced, more experienced at cycling with motor traffic, and may be cycling for more than one day

(e.g. touring the region or country). These form part of Greater Wellington Regional Council's 'Wellington Region Cycle Network' (as defined in the 2015 Greater Wellington Regional Land Transport Plan).

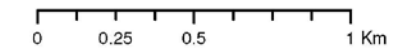
Urban design includes attention to a streetscape as a whole, to emphasise its particular function which may be as a traffic 'link' (for traffic movement) or a 'place' (where people might want to stay or 'linger', such as a shopping street). Measures to enhance a locality's quality as a 'place' in urban design terms will often make cycling more attractive there, through cycling being a 'human scale' form of transport. Masterton is a signatory to the Government's *Urban Design Protocol*, co-ordinated by the Ministry for the Environment.



Date: 5/12/2017

Masterton Proposed Cycle Routes

DISCLAIMER: The Masterton, Carterton, and South Wairarapa District Councils accept no responsibility for actions or projects undertaken or loss or damages incurred, by any individuals or company, or agency, using all or any of the information presented on this map. The Councils do not provide interpretation of this information or advice on how to interpret, or utilise this information. Your own independent and appropriate professional advice should be sought. The information displayed on this map may contain errors or omissions or may not have the spatial accuracy required for some purposes.



Scale = 1:20,000 Drawn By: alant

Cycling around rural Masterton

Like in town, cycling may take place on any road in the rural areas.

People are more likely to cycle around Masterton District for its own sake, rather than to meet a journey need. They are also more likely to be fitter, and also more experienced at cycling with motor traffic. There will also be some less experienced cyclists, such as family groups including children.

Cycle tourists and sport cyclists may travel well out from the edge of a rural road, because that is where they are more visible to motorists, can be overtaken more safely, and are also able to ride closer to the speed of motorised traffic. Motorists need to be aware of this – a cyclist may be ‘in my way’ for their own safety. Cyclists are allowed to ride two abreast, but the general traffic law against delaying following traffic also applies.

Cyclists may prefer a finer grade of road surface chip, for comfort and to avoid punctures. This will be considered for popular cycle touring, sports and event routes, noting that other needs may not always make this possible.

Map 2 shows cycle routes, outside Masterton’s urban areas, around Masterton District.

The NZ Cycle Trail’s ‘Great Rides’ are being linked together nationwide through rural roads, including the Wairarapa Valley Cycleway, which passes through Masterton District. This will extend, beyond Masterton District, to link the Rimutaka Trail ‘Great Ride’ with the Hawkes’ Bay trails, and others beyond the Tararua Range.

Greater Wellington Regional Council has produced a Cycling Map showing the already-existing Regional Cycling Network, and the Wairarapa Valley Cycleway.

The Wairarapa has also been popular for major sport cycling events, such as the *Tour of New Zealand*. Associated with this, the wider Huri Huri cycling festival has been successful in recent years.

Rural roads often lack width to provide cycle lanes, which in any case may not help. General widening of rural roads may encourage faster driving, so roads will be widened for cyclists (as funding allows) in selected locations (for example, where brows of hills restrict visibility). Rural roads may fall away towards a roadside ditch, so widening may not be feasible. Around corners, special care must be taken to avoid



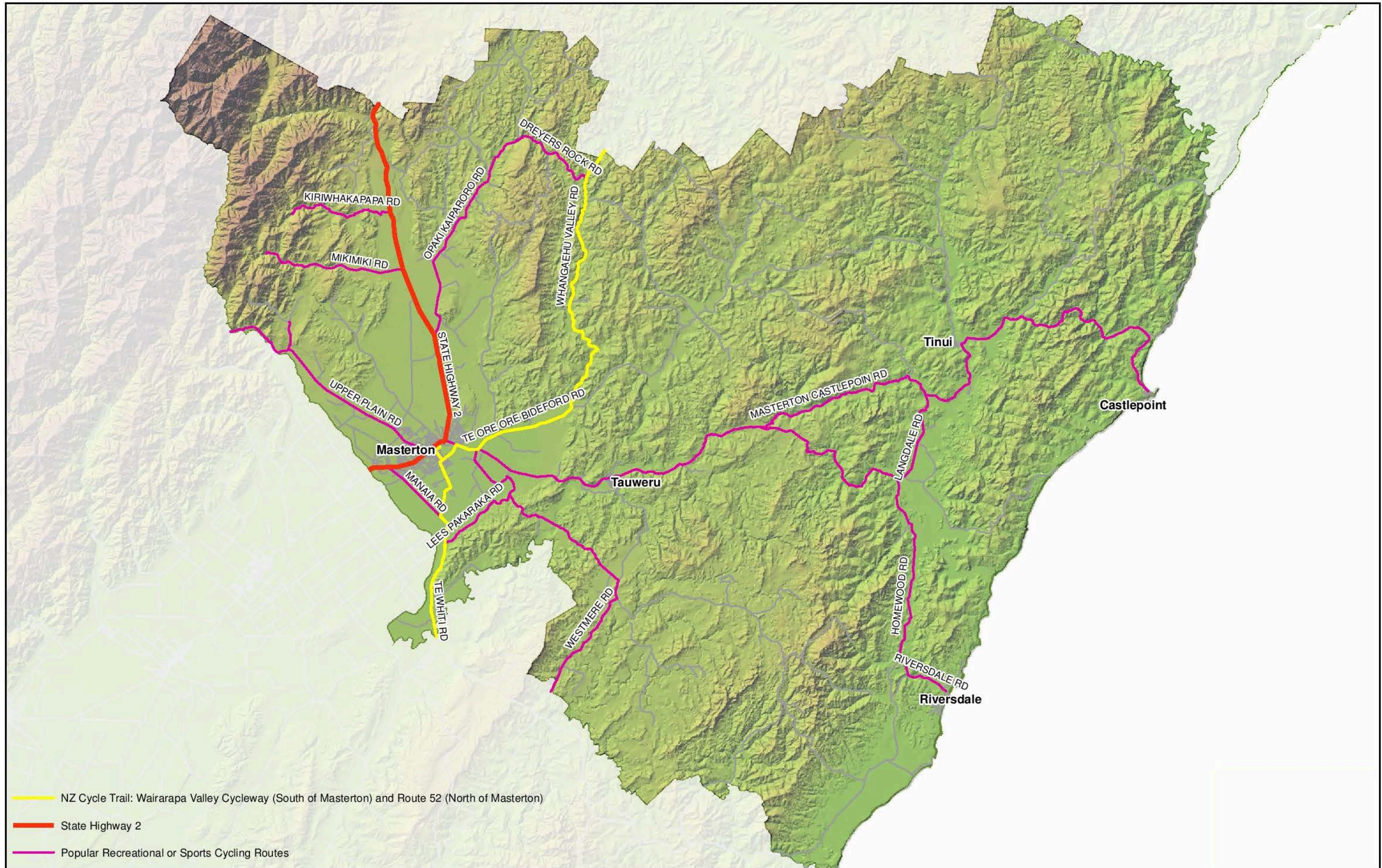
The Government’s 2014 Cycling Safety Panel recommended a law change to require the safe rural passing distance shown in this sign, which is on Johnstone Street, at the point where the Wairarapa Valley Cycleway (part of the NZ Cycle Trail) leaves the Masterton urban area (the recommended safe passing distance for urban areas is 1.0 metre).

increased width (or an added cycle lane) encouraging cars to cut the corner (creating greater risk through higher speeds). Edge lines, however, may help in some cases (to define the road edge), or (where width allows) space for a shoulder.



Lees Pakaraka Road is on a popular sports cyclist training circuit. This short stretch of cycle path enables cyclists using the circuit to more easily merge with traffic on Masterton-Stronvar Road

Bridges may be a particular problem, especially where little or no space exists for shoulders. Motorists here need to wait in order to overtake a cyclist on the bridge (requiring cyclists to dismount, an approach sometimes taken, actually exposes the cyclist to danger for a longer time, and to a greater danger since they occupy more road space). Signage could indicate where a bridge is on a popular cycling route. Technology allow signals to be activated (manually, or by infrared detection) to warn following motorists when a cyclist is on the bridge. Adding 'clip-ons' to a bridge is generally very expensive, and if done should be to both sides, to avoid cyclists in one direction from needing to cross the road twice (which, depending on the type, volume and speed of other traffic, may be more dangerous than riding on the road).



- NZ Cycle Trail: Wairarapa Valley Cycleway (South of Masterton) and Route 52 (North of Masterton)
- State Highway 2
- Popular Recreational or Sports Cycling Routes





N
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Date: 31/01/2017

Masterton Proposed Rural Cycle Routes

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Scale = 1 : 250,000 @ A3

Drawn By: alanf

Who might successfully deliver this Cycling Strategy?

This Strategy is led by Masterton District Council, with the help of many others.

Masterton District Council manages the road system (except State highways) and public parks.

State highways are managed by the **NZ Transport Agency**, whose office for this purpose is in Wellington. The NZ Transport Agency also manages the National Land Transport Fund which funds State highways and contributes some funding towards local (Masterton District Council) roads.

The three District Councils of the Wairarapa – Masterton, Carterton and South Wairarapa – jointly fund and oversee the **Wairarapa Road Safety Council**, with a manager and other staff based in Masterton. This covers education of road users (including motorists and cyclists) as well as some other functions including school-based travel planning on behalf of the Greater Wellington Regional Council.



Go By Bike Day, 2015. This schoolgirl is benefitting from some road safety advice from the Wairarapa Road Safety Council

The **Greater Wellington Regional Council** has also planned its own Regional Cycling Network, producing the Wairarapa Cycling Map (part of a series of maps covering the Greater Wellington Region), as well as preparing the statutory *Regional Land Transport Plan 2015*, which looks ahead on transport investment for the next ten years. The Regional Council, as co-funders of public transport services, also cover issues such as bikes on trains, and cycle parking at rail stations.

The Regional Council's Masterton office has helped set up the Wairarapa-based *WaiBike* website and Facebook page, and has helped bring the *Bikes in Schools* project to Masterton. *WaiBike* gives information about local cycling routes, as well as tips and advice to encourage and inspire local people and visitors, so that more people will be encouraged to get around by bike.

Greater Wellington Regional Council also runs the *Pedal Ready* cycle skills programme – www.pedalready.org.nz. The Wairarapa Road Safety Council assists with coordinating bookings in local schools.

The **Trails Wairarapa Trust**, which plans on-road and off-road cycle trails across the Wairarapa, and the **Wairarapa Multisports Club**, are represented together with the organisations outlined above on the **Masterton Cycling Advisory Group**. Led by Masterton

District councillors, this Advisory Group has helped oversee preparation of this Cycling Strategy, and will be involved in helping ensure it is successfully delivered.

What might successfully deliver this Cycling Strategy?

Cycling Strategy Stakeholder Progress and Monitoring

Agency: Masterton Cycling Advisory Group

The Masterton Cycling Advisory Group will continue to meet at least twice each year, and will oversee progress on the Cycling Strategy. Additional meetings will be held as and where necessary, such as:

- workshops on particular aspects (for example, workshops were held in 2015/16 to scope this strategy)
- meetings with Carterton and/ or South Wairarapa District Councils to discuss cross-boundary or Wairarapa-wide issues
- special meetings to receive guest presentations (for example, a special meeting was held in 2015 addressed by Paul McArdle of *Bikes in Schools*, in which the Group collaborated with the Wairarapa District Health Board, Lakeview School, and the *Bike On New Zealand Charitable Trust*)

Each year the Group will also receive a report:

- outlining progress on implementing the Strategy
- identifying projects which the Group is invited to support, for including in forthcoming funding applications and programmes (such as Council's Long Term Plan, the National Land Transport Programme, or the Urban Cycleways Programme)

'Sub' groups may also be set up, if considered helpful, to cover particular aspects (for example, travel planning, road safety or cycle touring).

Other individuals may be co-opted onto the Group if deemed helpful, for example for particular skills or to represent a particular constituency.

Masterton Town Cycle Route Network Development

Agency: Masterton District Council (Roading Asset Management; Parks Reserves and Facilities)

Proposals will be identified, for developing and implementing a cycle route network for Masterton Town (building on progress made since the 2009 Cycling Strategy). This might be funded through the District's Land Transport Programme, which includes road renewal, road maintenance and minor road improvement elements. More complex or costly proposals might be eligible for 'one-off' funding from the Government's *National Land Transport Fund* or *Urban Cycleways Programme*.



Councillor Chris Peterson, Chair of the Masterton Cycling Advisory Group, with his bike at Go By Bike Day 2015



Bikes in Schools launch, at Lakeview School, Masterton, 2016

Bikes in Schools

Agencies: Greater Wellington Regional Council, Wairarapa Road Safety Council, Wairarapa District Health Board, Bike On New Zealand Charitable Trust

The *Bike On New Zealand Charitable Trust* has initiated Wairarapa's first project, at Lakeview School. Others may follow. This typically involves direct provision of bikes, other equipment, and trails-type infrastructure within the school grounds. A range of sources might

fund this type of initiative: the Health Board, the Regional Council, local community grant-making bodies and service clubs, or the District Council. Active support of a school's parents, staff, Board of Trustees and pupils is also very important.

Travel planning

Agencies: Wairarapa Road Safety Council, individual school boards, parents, teachers, pupils, local businesses

A travel plan is a package of measures and initiatives that aims to reduce the number of car journeys made, by providing people with greater choice regarding the modes that they use. This can be achieved by providing realistic alternatives to the car, making alternatives to driving more attractive, providing relevant information regarding travel options and by managing car parking provision.

Attitudes and habits are reinforced over time – so travel planning involves more than publicising the benefits of cycling. When people talk together and decide to work together against 'school gate chaos' (too many cars, causing congestion and road safety risk), then change is possible. This is a co-operative exercise, led by the Wairarapa Road Safety Council.

Travel planning based around schools tends to be the most common example, but large employers, or several smaller employers working together, can also together reduce car use and increase uptake of cycling for trips suited to it, with benefits including less employee car parking,



Screenshot of the 'WaiBike' website

improved staff fitness, and reduced sickness/ absenteeism. Measures could include secure cycle parking, 'staff bikes' for local work-related trips, and 'guaranteed ride home' arrangements for late-working staff.

Travel planning can be led by community organisations, for example based around major events or locations such as the town centre.

Community Marketing: My Masterton

Agency: Masterton District Council (Communications)

The *My Masterton* initiative aims to attract people to live in Masterton through creating a positive image. Cycling fits with this, and has already been used in *My Masterton's* graphic imagery.

Community Marketing: WaiBike website

Agencies: Greater Wellington Regional Council, social media participants

This *Facebook* page was launched at the 2015 *HuriHuri* cycling festival, and encourages individuals to be involved who are not attracted to 'cycling clubs', and regard cycling as something they are interested for practical day-to-day purposes.

The success of *WaiBike* depends on public involvement. The voice of the casual rather than 'club' cyclist may not always be heard in the public arena, and it is to be hoped that interested would-be casual cyclists will engage with *WaiBike*.

Community Marketing: Road safety promotion

Agencies: Wairarapa Road Safety Council, Greater Wellington Regional Council

Wairarapa Road Safety Council aims to raise awareness of cyclist safety issues through media, displays and distributing resources. Examples of events have included *Go By Bike Day* (part of the nationwide *BikeWise Month*), *Be Bright* campaigns (encouraging cyclists to make themselves conspicuous, for example by using lights at night and wearing light-coloured or reflective clothing) and the *HuriHuri* cycling festival. As part of longstanding nationwide monitoring, there's an annual survey of helmet wearing rates. Further details of WRSC's work can be found in an Appendix.



A 'Frocks on Bikes' event in Carterton. Whilst not restricted to women, these events aim to 'normalise' cycling by deliberately dissociating it from its traditionally 'macho' public image

Pedal Ready instructors, on behalf of Greater Wellington Regional Council, deliver cycle safety programmes within primary schools, and there's a cycle trailer and a fleet of bikes to help in this.

District-wide (and Wairarapa-wide) cycling and cycle touring

Agencies: Greater Wellington Regional Council, Masterton District Council (Parks Reserves and Facilities), Wairarapa Multisports Club, Trails Wairarapa Trust, voluntary sector service organisations, private landowners

Much cycling activity around Masterton District is on local roads, but (especially for less confident cyclists and family groups) off-road trails are also being developed. Development of such trails tends to be led by voluntary sector trusts or service organisations, who rely on support from public and private sources. The co-operation and support of private landowners is also very important, since some trails or cycle routes pass through private land.

How might we improve the transport network for cycling?

Cyclists in urban Masterton, like other traffic, will use the road network as their main means of getting where they want to be.

As outlined above, for more confident cyclists, the main road system will serve their needs best, as it does for general motor traffic.

Less confident cyclists, and child cyclists, will tend to want be away from the main general traffic routes. In Masterton this will mostly mean quieter roads. Cycle lanes will not always be helpful, but where they are it may be necessary to prohibit on-street parking.



This improvement of the Renall Street/ Pownall Street intersection slows all traffic through adding a very small roundabout, kerb build-out areas, and median waiting areas for crossing pedestrians. It helps both pedestrians and cyclists, and improves overall road safety.

Off-road paths will sometimes serve a practical journey need, but more often will enable people to enjoy amenities like parkland and rivers for their own sake.

Various engineering techniques can be used to improve the transport network for cyclists. These generally either aim to slow general traffic, or in other ways to encourage general traffic to be aware of cyclists and give them due consideration, or to separate cyclists away from general traffic. The latter may vary from marked cycle lanes on the roadway, through 'protected' cycleways (for example, between a roadside footpath and cars parked on the roadway) or paths away from the road altogether.

The most appropriate engineering measures – to help cyclists whilst also respecting the needs of other traffic (including pedestrians) – will vary according to the specific situation, and the types of cyclists envisaged to use the particular road. Generally, a greater level of slowing general traffic or separating cyclists will tend to be needed where general traffic is fastest and heaviest, or where the cyclists are less confident or newer to cycling with traffic. The following are examples of measures likely to be taken in different situations.

Traffic calming (away from main traffic routes)

This is appropriate away from main traffic routes, and where there is a lot of pedestrian activity. It is often proposed largely for pedestrian benefit and to raise urban design quality (as a 'place') but cyclists benefit too. Separation of cyclists from general traffic is generally not needed, because cyclists and motorists tend to travel at similar speeds. Examples are central parts of Queen Street, and Kuripuni Centre. Where buses or other large vehicles are present, 'speed cushions' may be preferable to 'raised tables'; 'speed cushions' allow buses' wider wheel base to pass outside the raised area.

Traffic speed management (on main traffic routes)

On main traffic routes, speed humps, speed tables and speed cushions will rarely be appropriate, because of the level and type of traffic using the road. In these situations, where cyclists will need to share the same road space with cars (for example, through shopping centres without available space for cycle lanes) other measures can encourage slower and safer driving. Examples might be appropriately-positioned street trees to give a sense of enclosure (taking care not to obstruct visibility), shrubs or other forms of landscaping.



Sharrows' on Featherston Street, Wellington

Sharrow markings

Relatively new to New Zealand, these simple markings – a cycle logo with two chevrons – indicate where a cyclist may be expected, for the guidance of both cyclists and motorists. They tend to be used in slow-speed environments next to on-street parallel or angled car parking, to make clear that cyclists need to be well away from the parked cars, in the main traffic flow, to avoid opening doors or cars reversing.

On-road cycle lanes

These tend to be appropriate in moderate or faster speed environments, and where reasonably confident cyclists are expected. They do require significant overall roadway width, and in many cases this will require on-street car parking to be prohibited. A cycle lane will generally need to be a basic minimum of about 1.5m, and more than this when particular factors apply, such as faster speed environments or next to on-street car parking. At intersections cyclists will often need to merge with general traffic (for example, at roundabouts, or to protect themselves from left-turners), so cycle lanes are not generally appropriate through intersections (except across minor side roads or driveways).

Off-road shared cycle/ pedestrian paths

Generally, off-road paths work better shared with pedestrians, because measures to separate cyclists and pedestrians from each other (for example, a centre-line) may confuse both groups, and not be observed. More important is adequate total width: 3.0m is usually ideal in most situations,



Green surfacing to alert motorists to cyclists' presence on a Chapel Street cycle lane. Note how the drain grate is 'cycle friendly' (will not trap cyclists' wheels) and the lane ends before the roundabout to enable cyclists to merge with general traffic (important especially if they are turning right)

and wider where use is very heavy. Narrower widths may work well on open ground where visibility is good and there is grass either side of the path. Path width needs to take account of pathside barriers, such as bridge ballustrades, because of the width taken up by bicycle handlebars. For personal safety, good lighting, significant numbers of other users and/ or absence of hiding places for potential assailants, are important.

'Separated' or 'protected' cycleways (mostly within the road reserve)

These are cycle lanes with some form of physical barrier separating cyclists from other traffic. This may be a kerb, a raised surface marker, or a series of posts (usually 'frangible', able to be knocked over without damage). In some cases, cars parked on the roadway may form the barrier. Experience of 'separated' or 'protected' cycleways in New Zealand is limited, and some examples have provoked controversy through application of their innovative design. They tend to be appropriate where general traffic levels are significant, and along the larger arterial roads, where comprehensive traffic calming would not be an option. Traffic calming tends to be more appropriate than 'separated' or 'protected' cycleways on less busy roads, and the most successful 'separated' or 'protected' cycleway overseas examples tend to be in the context of wider more general transport policies which involve greater restrictions on car movement (and parking) than is common in New Zealand.

Advanced stop boxes

These are used in association with traffic signals, to give cyclists a 'head start', which has safety benefits through helping visibility, as well as time advantage when associated with a kerbside on-road cycle lane. There are currently no traffic signals in Masterton, so advanced stop boxes have no role, but they could be considered on cycle routes if traffic signals were installed in the future.

Unassisted shared space

In many current situations, the existing road design is the most appropriate situation for cyclists. Cyclists and general traffic share the same space, and rather than engineering change, attention may be better directed at working with all road users to encourage respect for each other. Traffic speeds will often be slow, and signage and/ or publicity may be helpful (for example, to make clear that a particular road forms part of a cycle route). In some cases, physical measures to slow traffic (such as traffic calming measures, as described above) may be included, and especially in these cases and where combined with filtered permeability (see below) such streets are sometimes known as 'neighbourhood greenways', 'quiet streets' or 'bicycle boulevards'.

Filtered permeability

This area-wide planning approach tends to restricts movement for motor traffic (for example, through road closures or one-way streets) while allowing less restricted movement on foot or by cycling (for example, through exemptions to the above, or by paths connecting cul-de-sac roads). The effect may be to reduce motor traffic volumes and speeds, and thus create an environment more attractive for walking and cycling.

Signs and publicity

Direction signs will alert people using the cycling network to destinations – where the routes go to, how to get there, and how long that is likely to take. For cyclists, this is likely to be more useful than giving a distance in kilometres, and has its own value in encouraging the uptake of cycling.

Progress towards delivering this Cycling Strategy

Council will prepare (with the assistance of the Masterton Cycling Advisory Group) an *Implementation Plan*, to be reviewed annually. This complements ongoing consideration of cyclists' needs in new roading, bridge replacement, realignment and other roading works.

It will also gather information on numbers of people riding bikes (see *Appendix: Cycle usage data*) and official data on cyclist crashes and injuries (through the NZ Transport Agency's *Crash Analysis System*; see *Appendix Cyclist crash data*).

The annual *Implementation Plan* will take into account likely funding availability. This may be from local body rates, or other sources such as the National Land Transport Fund, the Urban Cycleways Programme, health promotion funding, or any other national government funding which may be announced.

Under the Long Term Plan 2015's '*Activity Statements*' (covering different area of Council activity), Masterton District Council provides some funding to advancing cycling:

'Roading (Roads, Streets, Footpath and Parking)'

Under the '*Roading (Roads, Streets, Footpath and Parking)*' Activity Statement:

"We have made an annual provision of \$70,000 in the roading programme (from rates and subsidies) for cycling projects. This could increase if additional government funding is made available. This will meet increased demand for safe cycling and has the potential to attract cycle tourists with subsequent economic benefit."

This is likely to be spent on the roading network, and attracts subsidy from the NZ Transport Agency. The Dixon Street (Bannister Street-Worksop Road) cycle lanes, provided in 2015, were funded this way.

The sentence *"This could increase if additional government funding is made available"* recognises that Government sometimes commits extra money. The *Urban Cycleways Programme* is an example, announced in late 2014. Early in 2015 Council enquired about eligibility for this funding, and the NZ Transport Agency made clear that Masterton was not a *"main urban centre"* (for which this Fund was intended), and so would not be likely to be eligible, unless (possibly) other planned projects fell through.

Community Facilities and Activities: Parks, Reserves and Sports Fields

Under the '*Parks, Reserves and Sports Fields*' category within the '*Community Facilities and Activities*' Activity Statement, Council referred to its intention of extending an off-road recreational trails network, which included investigation of rural district network trails which would link into a national network. Council intends to work with other parties, and this will be covered under a '*Wairarapa Community Rural Trails Network Plan*'.

Council has already started building its *"off-road recreational trails network"*, as shown on Map 1, and is providing \$267,000 (over 10 years) for cyclists likely to use *"off-road recreational trails"*. A further \$259,000 (over years 2 and 3) is for those likely to use *"rural*

district network trails that will link into the national network” with an additional \$20,000 allocated for year 1 investigation.

Potential projects are assessed regarding the benefits which may accrue from them. Identification of benefits is qualitative, and complex because a wide range of different types of benefits could be identified, which are generally difficult to express in quantitative terms (e.g. dollar values) or to compare with or rank against each other. The basic principles which will be used in identifying benefits are outlined below:

- Likely safety benefits for existing cyclists (since crashes are very rare, an assessment will often need to be qualitative, based on factors such as the volume, speed and type of motor traffic; complexity of traffic movements; and visibility),
- Likelihood of attracting to cycling those who do not currently cycle (through for example providing a cycle route where demand could be presumed to exist and where the current alternative would be a road traffic situation which might be presumed to be likely to deter people from cycling),
- Where economic benefits might prospectively result from the proposal (for example, completing a touring route which might bring to Masterton touring cyclists from elsewhere),
- Likely congestion or safety benefits to other (notably, motor) traffic (for example, through transferring trips from motoring to cycling, or transferring cyclists to routes away from potentially hazardous traffic situations),
- Opportunity to ‘package’ with one or more complementary projects. An example might be cycling infrastructure (/ ‘facilities’) ‘packaged’ together with the travel planning programme of a nearby school (for such a ‘package’ to be effective, the two projects should generally proceed at about the same time, or at least within the same funding year).

Working with others beyond Masterton District

Carterton District Council is reviewing its *Walk Cycle Carterton 2011* District Walking and Cycling Strategy.

South Wairarapa has prepared and approved a Draft Cycling Strategy, which is expected to be approved during the 2016/17 year.

Masterton District Council will work with Carterton and South Wairarapa District Councils, with a view to ensuring that all these strategies are consistent with each other, and with the *Greater Wellington Regional Land Transport Plan 2015*. Other important partners in delivering this Cycling Strategy are Greater Wellington Regional Council and the NZ Transport Agency.

Masterton Cycling Strategy Review

It is intended that this Masterton Cycling Strategy should be reviewed five years after its adoption by Masterton District Council.

In five years, much will have changed – government policies and strategies, funding regimes and sources, transport characteristics and much more. Assuming local and national government elections continue on three-yearly cycles, this time for review gives an opportunity to take account of any changes in government policies and strategies (such as the three-yearly *Government Policy Statement on Land Transport*) and feed into discussions about Council's next forthcoming Long Term Plan.

Appendix – Cycling Strategy measures of success

The Long Term Plan's *Outcomes* could be seen as generalised targets, for the Masterton community as whole.

Cyclist crashes and injuries have tended to be used as a measure of road safety strategy success, and they continue to be used as such at national level.

In recent years we have surveyed cycle usage in Masterton town, and started to build up an indication of how numbers of people cycling have changed over time (see *Appendix: Cycle usage data*). The amount of data is small, so its statistical significance is low, and the data only covers a few years so far; more years are needed to show any meaningful trend.

We can also measure success by the satisfaction Masterton people feel about cycling in Masterton, so we therefore invite people to give us their views (positive or negative).

Rural cycling is relatively recent as an area of government interest. Measures of success could be devised for this (for example, how many visit the Wairarapa and what they think of the place) but this is relatively under-developed. Public views are invited on what success might mean, and how we might measure it.

Appendix: Cycle usage data

Since 2012, manual counts of cyclists have been taken each year at four locations, to estimate changes in cycling levels:

- Short Street/ High Street/ Intermediate Street
- Te Ore Ore Road/ Colombo Road
- Church Street/ Dixon Street
- Pownall Street/ Renall Street

The counts covered all traffic movements, for 15 minute time periods between 7.00am and 9.00am, and between 3.00pm and 5.00pm.

The aggregated data for November/ December 2012, November/ December 2013, November/ December 2014 and May 2016 for all cyclists passing through each intersection are shown below. The counts were undertaken on a Tuesday or a Thursday during November or December, deferred if weather was inclement (for example, if it was raining) because this would depress cycling numbers.

	Nov/ Dec 2012	Nov/ Dec 2013	Nov/ Dec 2014	May 2016	Nov/Dec 2016
Short/ High/ Inter 7.00-9.00am	34	33	45	30	32
Short/ High/ Inter 3.00-5.00pm	32	21	28	37	34
Te Ore Ore/ Colombo 7.00-9.00am	21	14	15	12	14
Te Ore Ore/Colombo 3.00-5.00pm	16	10	13	30	15
Church/ Dixon 7.00-9.00am	22	31	19	8	8
Church/ Dixon 3.00-5.00pm	24	30	12	24	16
Pownall/ Renall 7.00-9.00am	30	41	45	25	37
Pownall/ Renall 3.00-5.00pm	30	28	42	38	47
Totals	209	208	219	204	203

Appendix: Cyclist crash data

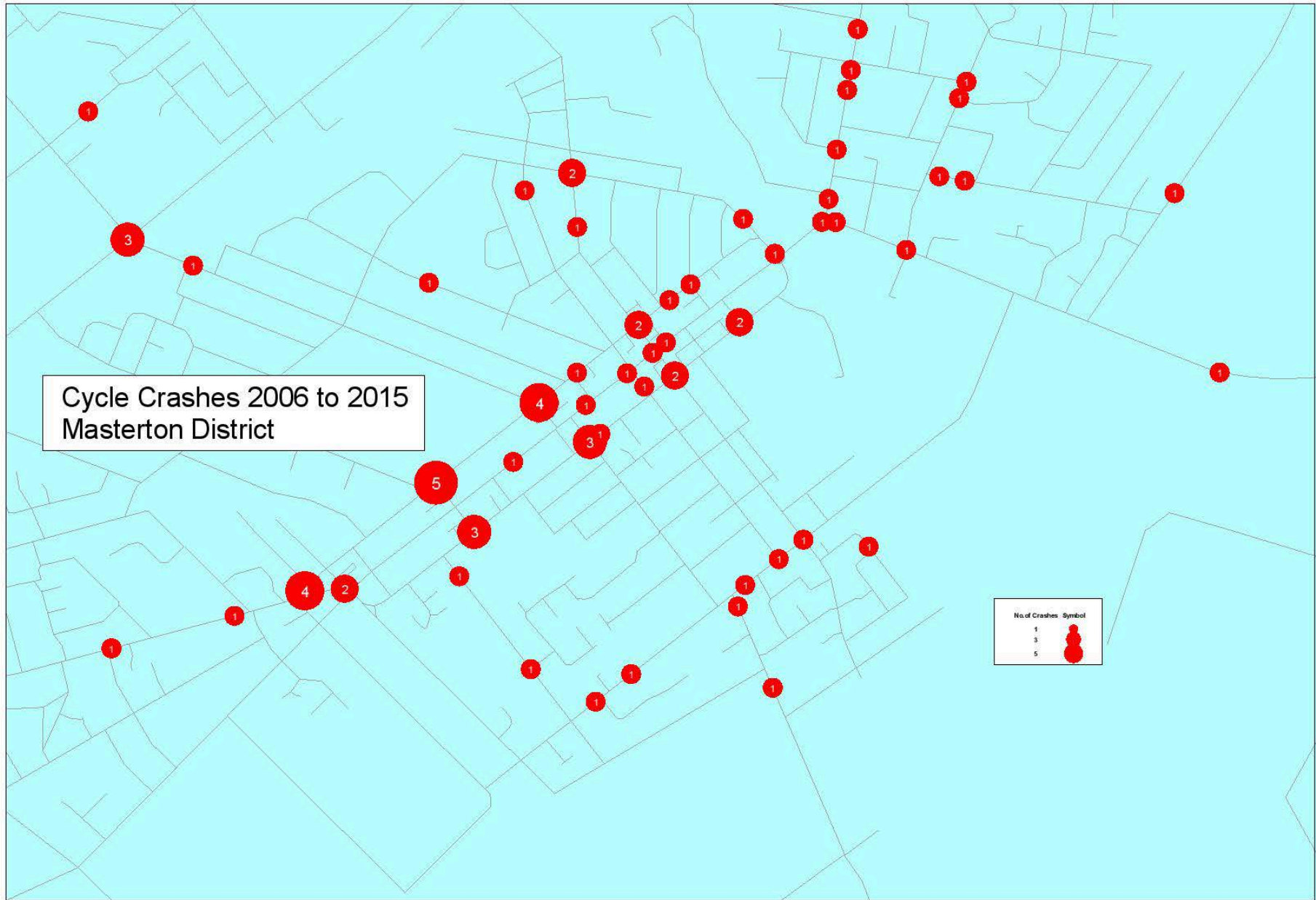
Crash and injury data has been kept for many years by the NZ Transport Agency and its predecessors, and analysed through a *Crash Analysis System*. This covers all road traffic, and cyclist crashes have tended to be under-reported (especially where they involve no injury or minor injury, or where no motor vehicle is involved).

Between 2000 and 2014, total cyclist crash and injury data for Masterton (from the Government's *Crash Analysis System*) are as follows:

- Fatality: 0
- Serious injury: 17
- Minor injury: 97
- No injury: 35

The *Crash Analysis System* only covers crashes reported to the Police, and for this reason non-injury crashes may be under-recorded.

Locations of these crashes are distributed throughout the road system. As would be expected, more crashes have occurred in locations with higher general traffic levels (i.e. the busier roads). The data does not highlight any individual locations as particularly hazardous, except, as would be expected, risk is greater where traffic volumes or speeds are greatest.



Appendix: Wairarapa Road Safety Council initiatives

The Wairarapa Road Safety Council (WRSC), funded by the NZ Transport Agency and Masterton, Carterton and South Wairarapa District Councils, shares the 'Vision' of the Government's *Safer Journeys* initiative:

"A safe road system increasingly free of death & serious injury".

As well as the Regional Council's 'Vision':

"To continuously improve the level of regional road safety based on a firmly established safety culture".

With the aim of bringing these 'visions' into reality, the WRSC contracts to Masterton, Carterton and South Wairarapa District Councils, to deliver a Road Safety Programme across Wairarapa – under a "*cluster*" arrangement. A major part of this is the Wairarapa Road Safety Action Plan (RSAP), which also brings in other partners: the Police, Accident Compensation Corporation, Greater Wellington Regional Council (GWRC) as well as the NZ Transport Agency itself. This document sets out 'activity outputs', responsibilities (such as where the money comes from, and 'who does what'), monitoring and evaluation.

Appendix: Urban Design Protocol

This initiative, co-ordinated by the Ministry for the Environment, was launched in 2005. Government and other agencies were invited to become "*signatories*" to the Protocol and Masterton District Council has done so. The Protocol and its signatories are committed to improving the quality of urban design, which includes the street as a public place. This in turn implies the creation of environments conducive to walking and cycling.